UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK
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UNITED STATES OF AMERICA,

v. 15 Cr. 706 (VSB)

NG LAP SENG,

Hearing

Defendant.

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New York, N.Y.
July 16, 2018
5:40 p.m.

Before:

HON. VERNON S. BRODERICK,

District Judge

APPEARANCES

GEOFFREY S. BERMAN
United States Attorney for the
Southern District of New York
BY: DANIEL RICHENTHAL
JANIS ECHENBERG
Assistant United States Attorneys

PARK JENSEN BENNETT LLP
Attorneys for Defendant
BY: TAI H. PARK
CHRISTOPHER GREER
-and-
KIRKLAND & ELLIS LLP
BY: GEORGE BAUER
CHENG ZHANG

(Case called)

MS. ECHENBERG: Good evening, your Honor, Janis Echenberg, Dan Richenthal for the government. With us at counsel table is Aashna Rao.

MR. PARK: Good evening, your Honor, Tai Park and Chris Greer of Park Jensen for Mr. Seng.

MR. BAUER: Also, George Bauer and Cheng Zhang from Kirkland & Ellis for Mr. Seng.

THE COURT: You can sit at the front desk. You are counsel on record.

We are here for a hearing.

Relating to Mr. Seng's surrender date, Mr. Park, are you ready to proceed?

MR. PARK: I am, your Honor.

MS. ECHENBERG: Your Honor, we had one logistical matter briefly. We had spoken to Mr. Park about this before. We would like Dr. Schneller, who we may call to testify, to sit at counsel table with us. Obviously, he is here. He is going to observe. We are going to want to consult with him regarding any cross-examination. Given the late hour, we think it's more efficient. He is right here at the table with us, so we can try to do some of that and not have to take a break before cross-examination.

THE COURT: Mr. Park.

MR. PARK: I think it's inordinate, your Honor, and I

don't think it's appropriate to have an expert witness staring right at the witness that he is going to be essentially opposing. I object to that process.

THE COURT: The question is twofold. Do you object to him being in the courtroom?

MR. PARK: Not at all, your Honor.

THE COURT: You just object to him being at counsel table.

MR. PARK: Correct.

THE COURT: Everybody, both Dr. Pan and the government's expert, they are all professionals. I am going to allow it. The incremental difference is something I think that really -- I don't find it necessary to prevent him from sitting at counsel table. I will allow that.

MS. ECHENBERG: Thank you, your Honor. We just ask Dr. Schneller to come up.

THE COURT: Any other logistical things that we should deal with?

MS. ECHENBERG: No, your Honor.

THE COURT: Mr. Park.

MR. PARK: No, your Honor.

THE COURT: Mr. Park, your first witness.

MR. PARK: The defense calls Dr. Pan.

STEPHEN PAN,

called as a witness by the Defendant,

having been duly sworn, testified as follows:

MR. PARK: Judge, I'll hand up a duplicate set of what I've placed before the witness. These are the exhibits I intend to refer to through this witness.

DIRECT EXAMINATION

BY MR. PARK:

Q. Good evening, Dr. Pan. Could you just tell the Court what your current employment is.

A. I'm currently an attending cardiologist at NYU Langone Health.

Q. How long have you held that position?

A. Three years.

Q. Where were you before then?

A. I had -- before then I was a heart failure and transplant cardiology fellow at Columbia Presbyterian Medical Center in New York.

Q. Sir, I am going to ask you to turn to tab 1 in that binder in front of you and direct your attention to what's been marked as NG Exhibit 3702-3.

Do you see that?

A. Yes.

Q. If you could just flip through the papers and just make sure you have the whole thing in front of you.

Do you recognize that document?

A. Sure. It's my CV.

Q. And is this a fair and accurate statement of both your educational and professional experiences?

A. Yes. I hope so.

MR. PARK: Your Honor, we would offer NG Exhibit 3702-3.

THE COURT: Any objection?

MS. ECHENBERG: No objection.

THE COURT: 3702-3 is admitted in evidence.

(Defendant's Exhibit NG 3702-03 received in evidence)

Q. Doctor, can you inform the Court what your educational background is?

A. I graduated from college at Columbia University in 2002. I then went onto medical school at University of Pittsburgh and graduated from there with a -- with honors in 2007. I then went to Stanford and did my internal medicine residency, a biomedical informatics fellowship and then a cardiovascular medicine fellowship, all at Stanford hospitals and clinics, known and Stanford Health. In 2014, I came to Columbia Presbyterian Medical Center in New York to finish my training in heart failure and transplant.

MR. PARK: Your Honor, on the basis of the document that's been offered in evidence as 3702-03, as well as the testimony that you just heard, we would move for the admission as an expert in the field of cardiology.

THE COURT: Any objection?

MR. RICHENTHAL: No objection.

THE COURT: The doctor can testify as an expert in cardiology.

Q. Dr. Pan, do you know who Ng Lap Seng is?

A. I do.

Q. Who is he?

A. He is a patient of mine.

Q. And how long has he been a patient yours?

A. Since November 2015.

Q. And do you recall under what circumstances he came to you as a patient?

A. He was referred to me by my father-in-law, Hugh Mo, who asked me as a personal favor to see this patient.

Q. Do you recall what the medical issues were that caused him to come see you?

A. At that time I believe Mr. Seng was complaining of various atypical chest pain, not always associated with exertion, but he had a history of coronary disease that had been noted in his chart in the past, and his family, as well as my father-in-law, were concerned that due to life stressors it could tip him over, and he was at high risk for a heart attack.

Q. Do you recall some of the other conditions that appeared in his medical history?

A. He had a history -- reported stroke or actually I think two mini strokes or what we call transient ischemic attacks, which,

unfortunately, I could not find further history about. He also had a longstanding history of diabetes, hypertension, otherwise known as high blood pressure, and high cholesterol.

Q. And what, if anything, did you learn about coronary artery disease?

A. About his coronary artery disease?

Q. Yes.

A. I had scattered reports from his physicians in China, many of which, unfortunately, I could not read or translate. But from what I knew, he was at high risk. I believe he had had prior stress tests. I'd have to remind myself whether he had had a coronary angiogram, otherwise known as cardiac catheterization, in the past. I am a little unsure about that at this time, and I would have to look back at my records to know for sure.

Q. I'll ask you to look at tab 2 in your binder and specifically NG Exhibit 1. Tell the Court if that helps to refresh your recollection as to the coronary artery disease issue.

A. He had this cardiac CT done in 2012 that did show plaque in several arteries of -- that supply blood to his heart.

MR. PARK: Your Honor, unless your Honor would like me to move this into evidence, I don't think it's necessary. I just wanted it to refresh his recollection.

THE COURT: OK. That's fine.

MR. PARK: Thank you.

THE COURT: I don't think it's necessary.

Q. Now, after November of 2015, how often would you say you have seen Mr. Ng?

A. I think all told, again, I'd have to review my records to get an exact number, but somewhere around the order of between four and eight times in the office.

Q. When was the last time you saw Mr. Ng?

A. Professionally?

Q. Yes. The last time?

A. The last time I saw Mr. Ng was in the hospital I believe last week, right prior to his discharge after a stroke.

Q. Now, I am going to direct your attention to tab 3 and ask you to take a look at what's been marked as NG Exhibit 12 and ask you if you recognize that document.

A. I do.

Q. What is it?

A. That is my office visit note from June 15, 2018.

Q. Were you personally involved in preparing this document?

A. I was.

MR. PARK: Your Honor, the defense would offer NG Exhibit 12.

MR. RICHENTHAL: No objection.

THE COURT: NG Exhibit 12 is admitted in evidence.

(Defendant's Exhibit Ng 12 received in evidence)

Q. If you take a look at NG Exhibit 12, Dr. Pan, what are some of the conditions that you note with respect to Mr. Ng's medical health?

A. As I had stated before, he had a history of high blood pressure, diabetes, the questionable history of strokes in the past, nonobstructive coronary disease, which I now knew to exist based on an coronary angiogram done two years earlier --

THE COURT: Doctor, if I could ask you to slow down a tad just to make sure the court reporter is able to get everything. Go ahead.

A. He also had diffuse atherosclerosis as evidenced by his carotid ultrasounds which showed mild plaque there as well.

Q. Is that it?

A. Yes.

Q. Now, in connection with your treatment or in connection with your treatment of Mr. Ng, have you had occasion to look at the other medical reports created by other physicians relating to Mr. Ng?

A. I have only seen those that were created at NYU Langone Health.

Q. I will ask you to turn to tab 4 and direct your attention to NG Exhibit 20 and ask you if you recognize that as one of the documents from Langone that you reviewed?

A. I have seen this, yes.

Q. And what is this document?

A. This is the report from his coronary angiogram done, I believe that was early July of this year, July 9.

Q. That is a four-page document, is that correct?

A. Yes.

Q. At the end of that same tab there is an NG Exhibit 20A.

Do you see that document?

A. I do.

Q. And is this a document that you reviewed in connection with your work?

A. Yes.

THE COURT: Mr. Park, my copy has a page -- it's got 1 through 4, but then something else attached to it which looks like a cover letter perhaps.

MR. PARK: Yes, your Honor. That's the 20A that we were referring to.

What I realized, Judge, just for the record, we had initially sent this document as a whole, all five pages to your Honor as Exhibit 20. When I further examined it, I realized that the last page, 20A, is not an NYU health document but rather one created by a Dr. Attubato, which is a document that had been the subject of some discussion with your Honor and the government and Mr. Bauer, but a document that Dr. Pan has just identified that he reviewed as well.

THE COURT: I'm just pulling it off of 20.

MR. PARK: Very good, Judge.

THE COURT: I'm sorry. Go ahead.

MR. PARK: Your Honor, we would offer NG Exhibit 20, as well as 20A.

MR. RICHENTHAL: No objection to 20. We do object to 20A.

THE COURT: I'll allow it. Obviously, this isn't a trial. I'll decide what, if any, weight to give the exhibit.

20 and 20A are admitted in evidence.

(Defendant's NG Exhibits 20 and 20A received in evidence)

Q. If I could direct your attention, Dr. Pan, to NG Exhibit 20 and ask you what, in summary, that document relates to?

A. This is the report of Mr. Ng's coronary angiogram, again done on July 9, 2018 by Dr. Attubato. The findings show that he had had progression of his coronary artery disease. Basically, he had two new lesions in addition to the prior atherosclerotic plaques that were seen on a prior coronary angiogram in 2015. One of these was particularly concerning. It was a 90 percent lesion in his what we call the second obtuse marginal branch of the coronary arteries to his heart, and that was at that time a stented -- a drug-eluting stent was placed at that time, a second lesion in what we call the first left posterior lateral branch, also coming off of that same similar arterial system was -- also had what -- we would say a decent lesion, 75 percent stenosis, and that was also addressed

as well with the drug-eluting stent at that time.

Q. Just so it's clear, when you say decent lesion, what do you mean by that?

A. I would say it is a lesion that is severe enough that an interventional cardiologist would consider placing a stent at that time, that it could be flow limiting.

Q. And the purpose of those stents was to increase the flow of blood to his heart?

A. That is correct.

Q. That took place when?

A. That took place, again, on July 9, 2018.

Q. That was exactly a week from today, correct?

A. I'd have to do the math, but sure, yes.

Q. Today is July 16, right?

A. Yes.

Q. Now, with respect to 20A, what is that document?

A. That is a letter from my colleague, Dr. Attubato, basically stating his concern that Mr. Ng needed some time to recover from the procedure he had performed.

Q. And this is a document that you reviewed as well in connection with your duties?

A. That is correct.

Q. Do you see where, towards the bottom, Dr. Attubato writes: The highest likelihood of stent thrombosis and heart attack is in the first two weeks following stent implantation and for

this reason it is our medical advice his imprisonment should be delayed for this two-week period.

Do you see that?

A. I do.

Q. Did you agree or disagree with that assessment?

A. In general, I do agree with that assessment.

Q. Now, with respect to patients of yours that receive stent implantations, and I'm setting aside Mr. Ng for a minute, what do you normally recommend, if anything, in terms of activity levels right after a stent implantation?

A. A lot of that does depend on the exact situation in which someone gets a coronary stent. If someone comes in with what we call an ST elevation myocardial infarction, or STEMI, what we call it for short, which is the most severe type of heart attack, I do recommend that people refrain from going back to work, exercising, or lifting heavy weights for a period of up to a month, maybe even longer.

In the setting of a person who otherwise does -- is not coming in with a myocardial infarction or heart attack but is having an elective stent placement, such as maybe seen in this situation of Mr. Ng's, I generally recommend that someone refrain from going back to work or encountering any high-stress situations, lifting heavy weights or exercising beyond a reasonable amount for a period of about two weeks.

Q. Just so it's clear, is it your opinion that an artery that

has 90 percent -- is blockage the right word?

A. Yes.

Q. -- that that's an elective procedure, even for an artery in that condition?

A. It very much can be.

Q. But with respect to, as you just testified, the two-week period, you have mentioned the word stress. What do you mean by that?

A. Any sort of life circumstances, life events that would cause someone's blood pressure or heart rate to rise to a level that would be considered abnormal would be considered physiological stress.

Q. Why is that something to be avoided for somebody who has just had stents placed in him?

A. Those two parameters, increased heart rate and increased blood pressure, both increase demand on the heart. So at any point if there were increased demand on the heart, that could further -- it would basically create a situation where flow could be limited if there is any remnant lesion or narrowing of that heart blood vessel, especially if the stent had just been placed.

In addition, stress can raise levels of inflammation, which we know now is a major critical component of heart disease, especially atherosclerotic heart disease, and high levels of inflammation can also increase the chance of a stent

thrombosing or clotting off, basically.

Q. What, if any, relationship is there between high levels of stress and the potential for a stroke in a patient who has just had a stent implanted?

A. For the most part, high levels of stress should not cause a stroke post stent implantation beyond the normal risk that someone would have, except for the possibility if there is some sort of complication from the stent placing procedure. Then that would be -- any level of stress could absolutely increase the risk of stroke.

Q. What, if any, relationship is there between high levels of stress and difficulty controlling blood pressure?

A. High levels of stress, of course, contribute highly to difficult-to-manage blood pressure situations, yes.

Q. What, if any, relationship is there between a potential spike in blood pressure and a potential for a stroke event?

A. I am not entirely sure what the question is getting. Are you saying in relation to just sustained high blood pressure?

Q. Let's say for someone who has had a stent implanted, they have an incident of a spike in blood pressure. What, if any, impact might that have on somebody's risk for a stroke?

A. Any incidents of high blood pressure would increase the risk of stroke in anyone. Sustained high blood pressure elevations, of course, incur a higher risk.

Q. I am going to refer your attention, sir, to tab 5 and tab 6

and direct your attention to NG Exhibit 21 under tab 5 and 22 under tab 6 and ask you if you recognize those two documents?

A. I do.

Q. What, first, is NG Exhibit 21?

A. That is the initial neurovascular service consult note when Mr. Ng was admitted to the hospital with a stroke.

Q. That was what date, sir?

A. July 10, 2018.

Q. That was one day after the stent implantation?

A. That is correct.

Q. What about 22?

A. That is the MRI. That was the report of the MRI of the brain with and without contrast that was done on Mr. Ng, performed on Mr. Ng immediately after he presented to the hospital for his stroke on July 10.

MR. PARK: Your Honor, defense would offer NG Exhibit 21 and 22.

MR. RICHENTHAL: No objection.

THE COURT: NG Exhibit 21 and 22 are admitted in evidence.

(Defendant's Exhibits NG 21 and 22 received in evidence)

Q. Those documents in combination, Doctor, reflect the fact that Mr. Ng had suffered a stroke on or about July 10, is that correct?

A. The exact timing is unclear, but it was acute, so it would have been within the previous 24 to 48 hours.

Q. Is there anything in that report that reflects what contributed to that stroke, either 21 or 22?

A. So I have to admit that -- first of all, I'm not a neurologist. I'm a cardiologist. What I can tell you, based on just the report of this stroke -- of this MRI here is that the strokes were multiple, meaning they were on different areas of the brain, so they increased the chance that this was what we call cardioembolic, meaning that these strokes came from a source other than within the brain itself, but that something had come from -- basically, pieces of clot had come from another origin somewhere else in the body, most likely the heart or near the heart.

Q. Based on that information, as you sit here now, is it your inference that certain clotting had been migrated from the stent to cause the stroke?

A. That's actually impossible. Basically clots cannot -- the stent, the blood flow from the stent goes forward to a smaller blood vessel. The only way that a clot would cause a problem from a stent would be to cause a heart attack, basically. In this setting -- I actually have more information about this if it's allowable that I discuss that.

THE COURT: Information from where?

THE WITNESS: From other reports that were associated

with this hospitalization.

THE COURT: OK.

Mr. Park, do you know whether the reports that the doctor is about to refer to are things that we have?

MR. PARK: I'm not exactly sure which other report he is referring to, if we could have him orally describe it.

THE COURT: Sure. Go ahead. Doctor.

A. There was a CT angiogram of his head and neck that show that there was a ruptured small atherosclerotic plaque in his aorta, which is the major blood vessel coming from the heart, and that, in association with this MRI, leads me to believe and also his neurologist to have believed that during the cardiac catheterization, because of the requirement for a wire to be placed up through the aorta to the heart, that wire may have bruised the aorta and scratched off basically pieces of clot that -- or atherosclerotic plaque that may have ended up causing the strokes that he had.

Q. I am now going to ask you to turn to tab 7 and direct your attention to NG Exhibit 27 and ask you to just take a look at that and let us know if you recognize that document.

A. I do.

Q. What is the document?

A. It's the discharge instructions from Mr. Ng's admission when he was discharged on July 12, 2018.

MR. PARK: Your Honor, we would offer NG 27.

MR. RICHENTHAL: No objection.

THE COURT: NG 27 is admitted in evidence.

(Defendant's Exhibit NG 27 received in evidence)

Q. If you could turn to page 7 of that document, there is a list of medication on that page, is that correct?

A. Yes.

Q. And what does that page reflect?

A. It is basically the medications that Mr. Ng was instructed or recommended to take on discharge that he should continue to take at home.

Q. And if you wouldn't mind going through each of them so that the -- you can just describe generally what the purpose of that particular medication is.

A. Sure.

Actos, otherwise known as pioglitazone, is a diabetes medication.

Aspirin is a very mild blood thinner that we use to treat people who have heart attacks and people who need stents or have had a stent placed.

Clopidogrel, otherwise known as Plavix, is another mild thinner that is used to keep stents open after placement.

The dihydroergotamine mesylt is a drug that actually is not used in the United States very often, but was used a long time ago in other countries sometimes for chest pain like symptoms. This was a drug that he had been on that I had not

recommended.

Empagliflozin, otherwise known as Jardiance, is yet another diabetes medicine that has also shown benefit in cardiovascular disease.

Irbesartan, otherwise known as Avapro, is a drug used to control blood pressure. It also has effects in reverse remodeling the heart, helping the heart increase its strength and function.

Q. What, if any, relationship does that medication have to hypertension?

A. It treats hypertension.

Meclizine is a drug that's -- otherwise known as Antivert, is a drug that's used to treat a number of neurological diseases, oftentimes associated with dizziness, one of those being Meniere's disease, which was listed earlier as a possible diagnosis for Mr. Ng.

Metformin, otherwise known as Glucophage, is another diabetes medicine.

Nitroglycerine, otherwise known as Nitrostat, is an as-needed medication that is used to lower the blood pressure in a situation where someone is having active chest pain, is at very high risk of having a heart attack. It's also used to very rapidly dilate the blood vessels of the heart to again increase the flow and prevent a heart attack.

Rosuvastatin, otherwise known as Crestor, is a

medication that's used to basically lower one's cholesterol as well as one's inflammation levels.

Q. Is there another one on the next page?

A. Yes. Sitagliptin, otherwise known as Januvia, is another medicine that's used to treat diabetes.

Q. In total, there are 11 separate medications that Mr. Ng was prescribed, is that correct?

A. That is correct.

Q. How many of those relate to high blood pressure?

A. Just the one, irbesartan. Nitroglycerine as needed can be used, but it wasn't a standing medicine. It's only as needed.

Q. Now, am I correct, Dr. Pan, that since Mr. Ng was discharged on July 12, last Thursday, that this list has been updated, is that correct, with additional medication?

A. That's correct.

Q. Could you explain, please.

A. I was contacted by the family that he was continuing to have high blood pressure. As his physician at the time, I elected to initiate him on a second antihypertensive medicine. That medicine is amlodipine, otherwise known as Norvasc.

Q. What is the purpose of amlodipine?

A. That medicine is a part of a class of medicines known as calcium channel blockers that dilate the peripheral blood vessels and further reduce blood pressure.

Q. Do you recall what you were told about Mr. Ng's blood

pressure that caused you to recommend this medication?
A. I was provided with a list of blood pressures that he had had performed at his house or at his home and that the blood pressures were ranging, this is off the top of my head, anywhere from a systolic blood pressure of about 140, 145, to as high as almost 200, which is markedly abnormal.
Q. If you could just put in laymen's terms what that means, 145 to 200. What do those numbers represent?
A. So a normal systolic blood pressure usually is anywhere from 100 to 120. We usually start medical therapy when someone's systolic blood pressure is above 140, unless they have diabetes or other major comorbidities, such as coronary artery disease, in which case we may start medicines even earlier than that target of a systolic of 140. Like I said, 200 is very high.
Q. Do you recall when you first received this information?
A. I believe it was Saturday morning.
Q. And when was the new medication prescribed?
A. It was prescribed for him, I believe, on Saturday afternoon, and I do not believe he started it until Sunday morning, at the earliest.
Q. For a patient that has undergone stent implantation and is demonstrating high blood pressure, what, if anything, from your perspective is the main cause for concern that you would want to watch most carefully, sir?

A. Can you repeat that question one more time.

Q. For a patient that has had stents implanted and is exhibiting high blood pressure, what condition are you most watchful about, most concerned about?

A. So I think the two major conditions, one would be worried about is another stroke in this case or a thrombosis of the stent, which would cause a heart attack.

MR. PARK: Can I have a moment.

THE COURT: Sure.

Doctor, what dosage did you prescribe for the Norvasc?

THE WITNESS: I initiated him at a dose, a small dose of 2.5 milligrams daily, which is the smallest dose because I did not want to overdue the blood pressure reduction, especially this early after a stroke. If he tolerates that well, my plan was to further increase that to five milligrams daily.

Q. Dr. Pan, I only have one more question and that is, are you being compensated for your testimony today?

A. Not at all.

MR. PARK: Thank you. No further questions.

THE COURT: Cross-examination.

CROSS-EXAMINATION

BY MR. RICHENTHAL:

Q. Dr. Pan, you testified that you increased Mr. Ng's medicine for hypertension because his blood pressure, it was reported to

you it was ranging from 140 to 200, is that right?

A. That's correct.

Q. In fact, it never got to 200, isn't that right?

A. I do believe there was one measurement that was 201.

Q. Have you actually seen the records, Dr. Pan?

A. I have.

Q. This is a log that Mr. Ng took at his house using a CVS blood pressure monitor, is that right?

A. I don't know the blood pressure monitor.

Q. I am going to give you a binder. I want you to turn to what's been marked NG Exhibit 30. Do you have that in front of you?

A. This one?

Q. That's in front of you. Is that the log that you reviewed?

A. I had further logs actually as well.

Q. You had further logs. Did you give those to the defense?

A. I did not.

Q. You did not. Were you asked for them?

A. No.

Q. What did they look like?

A. They were other pages like this as well as verbal communications with the patient's daughter.

Q. Let's start with the pages. From what period of time, Dr. Pan?

A. The pages here?

Q. The other pages that you did not give the defense.

A. I do not know off the top of my head.

Q. Do they predate July 13?

A. They do not.

Q. They postdate July 13?

A. That's correct.

Q. You did not produce them?

A. I was not asked to do so.

Q. What specifically were you asked to produce in advance of this hearing?

A. The medical records dating from -- up until his discharge from the hospital.

Q. Were you not asked to produce anything since then?

A. No.

Q. Were you asked today to produce all records in connection with your prescription of Norvasc, 2.5 milligrams on Saturday, July 14?

A. I was. However, because that was a telephone call, there were no records.

Q. There are no records from that?

A. Except for the prescription.

Q. Except for the prescription itself. Did you produce the prescription itself?

A. I did not.

Q. Why not?

A. I was not asked to.

Q. These logs, these other records, no one asked you for them?

A. No.

Q. That's your testimony?

A. No.

Q. They postdate July 13. They are what, home readings of blood pressure?

A. That is correct.

Q. Who provided them to you, Dr. Pan?

A. The patient's daughter.

Q. Do you know who took those readings?

A. I was informed that it was his security.

Q. And they are not the readings that's in Exhibit 30?

A. I'd have to go back and get them and compare like side by side. I don't have them on me right now.

Q. They appear to be different, is that right?

A. I think there are records here that are not on this page.

Q. On that page is there any reading of 200?

A. No.

Q. Could you turn to the next page, please. Is there any reading of 200?

A. No.

Q. You also testified that you understood the range to be 140 to 200, is that right?

A. That's correct.

Q. There are actually several readings below 140, isn't that correct?

A. There are a few.

Q. In fact, as recently as yesterday there was a 123, correct?

A. That's correct.

Q. And a 135?

A. That's correct.

Q. And if you go back you'll see a 137?

A. I don't know which one you are referring to.

Q. On the first page.

A. On line 18?

Q. That's right.

A. OK.

Q. Now, it's not unusual, is it, for blood pressure to vary throughout a day or even a couple of days, isn't that right?

A. That's correct.

Q. There are multiple factors for that. Let's talk about them.

MR. PARK: Objection. There was a question. There was no answer.

MR. RICHENTHAL: I was in the middle of asking a question.

THE COURT: Hold on a second. It's not unusual. That question was answered, Mr. Park. The doctor said: That's correct.

And then there were multiple factors. You may not have heard him, but he did say: That's correct.

Go ahead.

Q. Are there multiple factors?

A. Absolutely.

Q. Is time of day one?

A. Yes.

Q. Is tobacco use one?

A. Yes.

Q. Is smokeless tobacco use one?

A. Yes.

Q. Mr. Ng uses both of those substances, correct?

A. I'm only aware of him using tobacco. I'm not aware of him using smokeless tobacco.

Q. Is alcohol use one?

A. Yes.

Q. Is what the patient ate recently one?

A. Yes.

Q. So it can vary throughout the day?

A. That is correct.

Q. And vary even throughout the week?

A. That is correct.

Q. That's not what medicine refers to as a spike, is it, a change?

A. I'm sorry. Can you repeat that question.

Q. A spike is a more significant increase in blood pressure than the mere fact that a number changes, correct?

A. A spike is not a medical term that we use.

Q. You used it, sir, in your direct examination. What do you mean by that?

A. I used it --

MR. PARK: Objection. Mischaracterizes the testimony.

THE COURT: When you use the term spike, Doctor, what did you mean by that?

THE WITNESS: I was just reflecting what Mr. Park had asked about.

Q. Did you understand what he was asking you?

A. I did.

Q. What did you understand him to be asking you?

A. He was asking about the clinical significance of these spikes. If you remember, my response was that any significant elevation of blood pressure is a risk, but sustained blood elevations incur the highest risks.

Q. Is it your testimony then that Mr. Ng has suffered from spikes in blood pressure in recent days?

A. I am not so sure of that because I don't have second-to-second readings.

Q. Based on the readings you have.

A. I cannot -- I don't have the information.

THE COURT: Doctor, let me just ask, the records that

you have before you and the ones that we don't have, would you characterize them as sustained high blood pressure?

THE WITNESS: I would. Very much so.

THE COURT: In addition to the things that Mr. Richenthal asked you about, not taking your medication, would that also cause your blood pressure to be high?

THE WITNESS: Absolutely.

THE COURT: Did, in fact, Mr. Ng at times not take his medication?

THE WITNESS: In the past he did not, but I was assured by his family that he was taking his medications, and I asked three times.

THE COURT: Do you know, what reason did he give for not taking his medication?

THE WITNESS: The medication that he complained of the most that he did not want to take was actually his cholesterol medicine, which was very unfortunate because I believe that to be the most likely etiology of the increase in his coronary artery disease, as well as his stroke. He told me that basically it made him feel funny when he took it at night, and he didn't like taking it.

THE COURT: Just so the record is clear, by etiology, you mean you think that because he wasn't taking his cholesterol medicine that his cholesterol levels were high and, therefore, contributed to the increased plaque between 2015 and

when he had the stents put in most recently?

THE WITNESS: I know that's the case because his low-density lipoprotein or -- the highest risk cholesterol level spiked from 110 to 180 in the intervening period with no change in the prescriptions otherwise.

THE COURT: I'm sorry, Mr. Richenthal. Go ahead.

BY MR. RICHENTHAL:

Q. When Mr. Ng's family reported to you that he had been taking his medication, did you ask to see Mr. Ng so you could confirm whether that was true?

A. It was over the weekend, so I was unable to do so.

Q. In the past, when Mr. Ng was reported to you he did not take his medication, did you then follow up to determine whether, in fact, he was?

A. There is really no way for me to tell whether someone is taking their medicines except to take them at their word. So, yeah, I have followed up with him in the past. Every single time I have seen him I have told him that he should continue to take his medicines, to be better about taking his medications. But there is no way that I can really be sure whether someone is taking their medications or not other than checking biomarkers such as blood tests to see how those have changed over time.

Q. Have you done that here?

A. I have. As I mentioned before, I took his cholesterol in

2015 and I took his cholesterol again recently and his cholesterol levels had spiked.

Q. You said Mr. Ng's family members reported to you the blood pressure numbers?

A. That's correct.

Q. Who specifically reported them to you?

A. Janet Ng.

Q. When was the last time you saw Ms. Ng socially?

A. I have not seen Ms. Ng socially.

Q. When was the last time you saw any of the Mr. Ng's family members socially?

A. I believe when I visited Macau several years ago, I did have dinner once with Mr. Ng's wife.

Q. How about Mr. Mo. When was the last time you saw Mr. Mo socially?

MR. PARK: Objection. Relevance, your Honor.

THE COURT: I'll allow it. Overruled.

A. The last time I saw Mr. Mo socially, and he is going to be very angry with me that I cannot remember, is, I believe -- am I allowed to consult my calendar to answer the question?

THE COURT: Is it on your phone?

THE WITNESS: Yes.

THE COURT: You can. Go ahead.

Doctor, the other blood pressure records, did you get those in paper form? Were they just orally reported to you?

THE WITNESS: Some of them were orally reported to me. Some of them were also sent by text.

THE COURT: Do you have them here?

THE WITNESS: I have my text on my phone, yes.

THE COURT: First, give us the first answer and then pull up the other text and I would ask you to allow Mr. Richenthal to see your phone.

THE WITNESS: Sure.

THE COURT: Thank you.

THE WITNESS: I last saw Mr. Mo socially on June 29, 2018.

Q. A little less than a month ago?

A. Yes.

Q. About how often a year do you see Mr. Mo socially?

A. About once a week on average. Maybe more.

Q. Once a week?

A. Or maybe less.

Q. When Mr. Mo sort of connected with Mr. Ng, you were aware, were you not, that he represented Mr. Ng?

A. I was aware.

Q. Did you suggest that perhaps a different doctor without a family relationship to one of his lawyers should be his doctor?

A. I did.

Q. What was the response you got, Dr. Pan?

A. His response is that he was very worried about his client.

He was undergoing a lot of stress and he really wanted me to see him because he knew that I could see him very quickly.

Q. This is November 2015, is that right?

A. That's correct.

Q. You just used the word stress, is that right?

A. That's correct.

Q. He reported to you in November of 2015 that Mr. Ng had stress?

A. Yes.

Q. Mr. Ng has also reported to you at various times that he has had stress?

A. That's correct.

Q. Specifically, stress connected to his legal case, correct?

A. Absolutely.

Q. In fact, fair to say, is it not, sir, that every time you have seen Mr. Ng, he has reported to you he has got stress connected to his legal case?

A. That's not actually true. There have been many ups and downs, as I'm sure you are familiar with his legal case. During times of the more impending action, legal actions against him, he has definitely shown more signs of heightened stress during those times.

Q. He has actually reported to you about that stress?

A. He has.

Q. That's not a recent phenomenon then, isn't it?

A. It's been up and down. More recently, yes.
Q. It's not just the past couple of weeks, correct?
A. There has been an increase in that stress in the last few weeks.
Q. Increase in the self-reported stress?
A. That's correct.
Q. Let's talk about blood pressure and stress. You have been seeing Mr. Ng since approximately early November of 2015?
A. That's correct.
Q. Is it your testimony that he has had elevated blood pressure the entire time you've been seeing him or only for the past three days?
A. He has had elevated blood pressure off and on during the entire time I have seen him. However, when I first began to see him, his blood pressure was actually very well controlled, at a target goal of systolic blood pressure less than 140 for the majority of the time. More recently, however, and especially within the last one to two weeks, his blood pressure has been very markedly increased, way above and beyond what his blood pressure was before.
Q. You say way above and beyond. What number do you have in mind when you say that?
A. 140 systolic.
Q. It's your testimony that his blood pressure prior to the past couple of weeks was far below 140?

A. It was not far below 140, but it was riding around that 140 line, so it did not necessitate further escalation of his medical therapy at that time.

Q. Mr. Ng has, in fact, had elevated blood pressure, what medical professionals refer to as hypertension, for two decades, is that correct?

A. I don't know the duration.

Q. Why don't you look at NG Exhibit 1 in your binder.

A. Which tab is that? I'm sorry.

Q. It should be marked with a sticker, a yellow sticker as NG Exhibit 1.

THE COURT: It may be in the other binder.

Q. I'm being told it may be in tab 2 in the binder that Mr. Park gave you.

A. I have it.

Q. That's your report, right?

A. That's correct.

Q. From early November 2015?

A. Yes.

Q. It says, does it not, that Mr. Ng has had hypertension, specifically history of hypertension, correct?

A. That's correct.

Q. In fact, he has had it since 1997?

A. As per the records from Macau.

Q. Would you agree with me he has had hypertension for roughly

two decades?

A. As per his records.

Q. As per his records?

A. It may have actually preexisted even longer.

Q. It could be longer than that?

A. Most people develop hypertension long, long, long before they are actually diagnosed with it.

Q. Your recommendation at the time was just to continue the medication he was already on, right?

A. That's correct. Because if you look in my note, his blood pressure at that time was 122 over 78.

Q. You can turn to page 5, please.

A. Uh-huh.

Q. Is that what you are referring to there?

A. No. I'm actually referring to his vitals that were done at that time on page 1 under additional documentation. Vitals: Blood pressure, 122 over 78.

Q. Could you look at where it says HTN, page 5.

A. Yes.

Q. What does that stand for?

A. Hyperextension.

Q. High blood pressure?

A. That's correct.

Q. And you wrote: Initially SBP 140s?

A. That's correct.

Q. What is SBP?

A. Systolic blood pressure.

Q. But after resting dropped to 120. What does that mean?

A. That means that his systolic blood pressure stopped from 140 to 120 while waiting in the office for me to come see him.

Q. Meaning it was originally 140?

A. That's correct.

Q. The level that you have testified to was of concern?

A. No. Actually, what I testified before was that levels around 140 would not necessitate escalation of his blood pressure regimen.

Q. What would necessitate escalation?

A. Higher -- markedly higher than 140.

Q. What's markedly?

A. So basically 145, 150, 160, 170, 180, and above.

Q. Your recommendation was to continue the drug for now and monitor, is that correct?

A. Yes.

Q. By the way, that's the drug that he's still on, is that correct?

A. That's correct.

Q. When Mr. Park read you the list of 11 medications, it was on that list, correct?

A. That's correct.

Q. He is actually been taking that for years, isn't that

correct?

A. He has.

Q. He tolerates it well?

A. He does.

Q. No known side effects?

A. Not that I'm aware of.

Q. Actually, millions of Americans take that drug, isn't that right?

A. That is true.

Q. In fact, actually millions of Americans have hypertension?

A. Yes.

Q. In fact, tens of millions of Americans have hypertension, isn't that right?

A. Probably, more, especially at the latest guidelines.

Q. How about this. Over age 65, the majority of Americans have hypertension, correct?

A. That's correct.

Q. It's a well-known condition?

A. Yeah.

Q. It's a treatable condition?

A. In patients who are aggressive about their treatment and taking their medications.

Q. And stop smoking?

A. And stop smoking, and drinking.

Q. Mr. Ng both drank and smoked, correct?

A. Yes.

Q. This is from November 2, 2015. Let's go forward in time. Would you turn to NG 3. That's going to be the next exhibit marked with a yellow sticky NG Exhibit 3.

Do you have that in front of you?

A. Yes, I do.

Q. That's from July 7, 2016, is that right?

A. That's correct.

Q. What did you discover about Mr. Ng's blood pressure at that time?

A. I have to remind myself by looking through these records, but looking at it right now I see that his blood pressure at that time was 143 over 69, still skirting that line, but not necessarily necessitating escalation of his blood pressure medication. I do believe at that time I advised him to continue to monitor and be better about the smoking and the drinking that I just discussed before.

Q. And taking his medication?

A. And taking his medications, correct.

Q. Let's go forward again.

THE COURT: Doctor, you said monitoring. Was it your understanding that Mr. Ng or someone else had created a chart and that he was keeping a chart at that time?

THE WITNESS: It was not my understanding. I believe at that time, and again I'm going off of memory, I do believe

that his daughter had told me that they have a blood pressure cuff at home, and I told them to let me know if those blood pressure readings were very high, such as higher than 160.

THE COURT: When you're treating someone with hypertension, do you recommend that they keep a chart like this?

THE WITNESS: I don't always because in my past history I've had patients who have had very variable blood pressures and who, unfortunately, worked themselves up because they see a high blood pressure and then escalate their blood pressure even higher. It's on a case-by-case and patient-by-patient basis.

THE COURT: Do you know if Mr. Ng has a pill case: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday. Do you know if he has one of those?

THE WITNESS: I don't know.

Q. Did you recommend here that Mr. Ng keep a log?

A. No.

Q. Do you know who did?

A. Do I know if he did?

Q. Do you know who recommended that Mr. Ng keep a log?

A. I don't know.

THE COURT: Could have been me.

MR. RICHENTHAL: Possible.

THE COURT: Because I think I mentioned something

during our conference about that.

Just to be clear, I wasn't recommending anything for Mr. Ng, but I mentioned that, in part, because I may have in the past had to keep such records myself.

Go ahead.

Q. Let's go forward again. I last asked you about a record from November 2, 2015. Could you go to NG 3 from July 7, 2016. That's the one I just asked you did.

Do you still have that in front of you?

A. OK.

Q. It actually says that Mr. Ng reported that he didn't take his medications this morning, isn't that right?

A. That's correct.

Q. That's another example of a time when he didn't take his pills?

A. Yes. Suffice it to say, he always -- one of the reasons why he always said he didn't take his medicines when he came to see me, he was always worried that he would have to get blood work done, and he was worried that if he did not eat anything, that if he took his medications there would be adverse effects. I tried to explain to him this was not the case, but he would not listen to me.

Q. Let's go forward to the next time you saw Mr. Ng, December 2017. It's marked as NG Exhibit 7.

A. OK.

Q. Do you have that in front of you?

A. Yes.

Q. What was Mr. Ng's blood pressure at that moment?

A. 147 over 73.

Q. That's 147?

A. 147.

Q. That's systolic blood pressure higher than 145, right?

A. That is correct. But, as I noted in that note, again, Mr. Ng did not take his medications because he was worried that he had to give fasting blood work, and it is dangerous somewhat to adjust someone's hypertension medicines unless you know exactly what they are taking.

Q. Did you ask him to come back after he had taken it so you could determine whether he was above that level you have expressed concern about?

A. I did not.

Q. Turn now to Ng 11. Do you recognize this?

A. It's his echocardiogram report from January 2, 2018.

Q. This is a couple of weeks later, is that right?

A. That is correct.

Q. Does this contain evidence of elevated blood pressure?

A. I'm only hesitating because sometimes these reports do contain the blood pressure and sometimes they don't. I actually don't see it on this report.

Q. Is it not in the lower right-hand corner, BP 143/73?

A. It is. It is basically at his regular level, 143 over 73, that's correct. He was also told to probably fast before this procedure as well.

THE COURT: You mention that because you suspect that he perhaps didn't take his medication?

THE WITNESS: I do.

THE COURT: Is that because of his past? If the past was any indication, that was his practice?

THE WITNESS: That's correct.

Q. Now, let's zip forward to June 15, 2018, roughly a month ago. This is NG 12. The defense offered this into evidence in your direct testimony.

Do you have that in front of you?

A. Yes.

Q. Now, once again, Mr. Ng admitted he had not been taking his statin regularly, is that right?

A. That's correct.

Q. Once again, you tested his blood pressure and this time it was 139 over 76, is that right?

A. That's correct.

Q. This was one month ago. Your recommendation at that time was, again, just monitor, keep taking your drugs, take them more regularly, right?

A. That's correct.

Q. And Mr. Ng also reported to you that he was continuing to

use tobacco?

A. He did.

Q. And actually smokeless tobacco as well, is that right?

A. I do not remember him mentioning that to me, no.

Q. I think it may be on the next page. Can we go to the next page. You see page 2 of 8 under social history, main topics?

A. Unfortunately, this is an abstract -- this is a problem with electronic medical records that they get copied forward. It's a terrible phenomenon, but it does exist. I did not ask him at that time whether he was using smokeless tobacco. It auto-imports that portion from prior admissions.

Q. You didn't ask him if he was still smoking?

A. I didn't ask him if he was using smokeless tobacco.

Q. Did you ask him if he was still using tobacco?

A. Yes.

Q. Was the answer yes?

A. Yes.

THE COURT: I'm sorry. Just so the record is clear, the current user, you are saying that it was probably previously reported and then imported into this one?

THE WITNESS: Yes.

THE COURT: Is it your testimony that at some point in time he had indicated he was a current user or is this somehow some sort of default?

THE WITNESS: So what it would mean is that basically

he reported to someone, not necessarily me, that he had been using smokeless tobacco and it got reported in his chart and that gets copied forward.

Q. Your recommendation at the end of this visit was, again, continue the same medication and monitor in short, is that right?

A. That's correct.

Q. Fair to say as of a month ago Mr. Ng had a history of occasionally elevated blood pressure. One time it was above 145. It was generally stable and your recommendation was for him to take his drugs and stop smoking?

A. That's correct.

Q. Now, that kind of hypertension that someone has had for at least two decades it's not rare. That's the type that millions of Americans have?

MR. PARK: Objection to the form of the question, your Honor. It's compound.

Q. Did Mr. Ng have a rare form of hypertension doctor?

A. To be honest, I don't know. People who have a rare form of hypertension that can be caused by other medical conditions often go undiagnosed for years. And actually recently given his recent blood pressure spikes, I have considered working him up for those possible rare etiologies.

Q. As of yet, there is nothing in the records indicating Mr. Ng has hypertension in a manner differently manifested than

millions of Americans, correct?

MR. PARK: Objection to form.

A. No.

THE COURT: I'll allow it. Overruled.

Q. You can answer, Doctor.

A. No.

Q. Now, this type of hypertension, it can be treated by a range of medical professionals, right?

A. That's correct.

Q. Doesn't have to be a cardiologist?

A. No.

Q. In fact, doesn't have to be a doctor, right?

A. That's not true.

Q. A nurse practitioner could check blood pressure, right?

A. That's true.

Q. Mr. Ng's security detail can check blood pressure?

A. That's true.

Q. Mr. Ng's family can check blood pressure, right?

A. That's true.

Q. And if there is going to be an adjustment to medication, does it have to be a cardiologist?

A. It does not. But for the most optimum data gathering, the guidelines do recommend that the blood pressure be taken by someone who professionally does it and that there is a certain protocol that should be followed when that blood pressure is

taken to alleviate the artifacts and other factors that may play into artificially raising blood pressure.

Q. Let me talk to you about that. The log of blood pressure in the past approximately three days, to your knowledge, were those readings done by someone who was medically trained in the manner you just suggested was guidelines warranted?

A. No.

Q. To your knowledge, was it done by anyone with medical training at all?

A. Not that I know of.

Q. When you got a phone call from Mr. Ng's own family reporting that his blood pressure was higher, did you ask him to come to your office?

A. No.

Q. Did you advise him to go see a doctor on call, one of your colleagues, perhaps?

A. No. Because it was on a weekend it was not urgent.

Q. Was NYU open at the time?

A. My office was not.

Q. Was NYU Langone Hospital open at the time?

A. The hospital was open for emergencies.

Q. Did you advise him to go to the hospital?

A. No, because it was not an emergency.

Q. Did you advise him to come to you or someone else first thing Monday morning to get a medically tested blood pressure

reading?

A. No.

Q. You took the word that the blood pressure readings you were told had been accurate?

A. That's correct. I should just make one remark. When he was in the hospital under the neurologist's care, I also saw that he had elevated blood pressures from 160 to 180 during that time as well.

Q. I want to talk about that, but just focusing on the past three days, did you ask him to come to you or your colleagues to do a medically guided blood pressure examination?

A. No.

Q. You took his family's word?

A. I did.

Q. Among the factors that affect blood pressure, you have already testified, are time of day.

You have to answer yes or no rather than just nod.

A. That's correct.

Q. Alcohol use?

A. Yes.

Q. Tobacco use?

A. Yes.

Q. What a patient may be eating?

A. Yes.

MR. PARK: Objection. Asked and answered.

THE COURT: Mr. Richenthal, get to the question.

Q. In addition, home blood pressure readers are not as good as the ones that are used in your office, isn't that right?

A. That's correct.

Q. In fact, there is a history that when one uses a home blood pressure monitoring device, it tends to read high, isn't that right?

A. That's not correct.

Q. It tends to read low?

A. It tends to be all over the place.

Q. It tends to be all over the place?

A. Yeah. There is no particular trend. What we advise patients to do is bring their home blood pressure cuff into the office so we can make sure the readings calibrate with their own readings.

Q. Have you done that here?

A. I have not done that.

Q. Have you advised Mr. Ng that would be a good idea?

A. I have not.

Q. After your examination on June 15, your recommendation, again, was to continue to try to take your medication regularly and adjust your lifestyle, right?

A. On June 15, yes.

Q. In other words, lifestyle adjustments and medication adjustments?

A. That's correct.

Q. Meaning take it?

A. Yes.

Q. After June 15, Mr. Ng reported a number of other symptoms, ended up going to the hospital a couple of times, is that right?

A. That's correct. But I wasn't aware of those visits.

Q. That was my question. Were you aware of those visits?

A. No.

Q. You didn't recommend that he do that, did you?

A. No. He did not contact me.

Q. On June 25, specifically, Mr. Ng was admitted to your hospital, NYU Langone, is that right?

A. That's correct.

Q. For flank pain.

A. I have to look at -- I don't have the records in front of me, but I think that that may have been one of his complaints.

Q. What is the flank?

A. The flank is the side, the abdominal side.

Q. He was discharged the same day, correct?

A. I believe so. But, again, I'd have to look back --

Q. Why don't you look at NG 15.

A. OK.

Q. Does that refresh your memory that Mr. Ng did not stay overnight?

A. It's a little difficult because some of this is in Chinese and I don't read Chinese.

Q. Can you flip through --

A. I'm doing so now. Unfortunately, this is just discharge instructions. There is no actual medical records other than blood tests on this one.

Q. We will go to the next one.

Two days later Mr. Ng went to an executive health center called Elitra. Are you aware of that?

A. I'm only aware of that after the fact. He did not -- I did not recommend that he go there.

Q. You're aware of that now?

A. Yes.

Q. Have you seen the records of it?

A. I have not.

Q. You haven't seen the records of it?

A. No.

Q. Before you testified today, you did not examine Mr. Ng's Elitra health records?

A. No. They were never sent to me and, as I stated before, I was only privy to the records from NYU Langone Health.

Q. When did you first learn that Mr. Ng had gone to Elitra?

A. I believe after I had found out that he was undergoing a cardiac catheterization.

Q. That's approximately July 9?

A. That's probably correct, yes.
Q. Given your expressed concern about his blood pressure, you didn't think it might be warranted to see what it was when he went to Elitra?
A. Again, I was not aware he went to Elitra, so how would I know that?
Q. I'm referring to July 9. Once you learned he had gone, did you think it advisable to learn what his examination showed?
A. No. Because by the time I found out, he was getting an coronary angiogram, which is a more pressing concern.
Q. Would it surprise you that Elitra concluded that his blood pressure was adequately controlled?
A. No, it would not surprise me, actually.
Q. That's June 27, 12 days after you saw him?
A. Again, I have not seen the records, so I am going by what you are saying.
Q. Mr. Ng also had a stress echocardiogram or stress echo, correct?
A. He had two stress tests.
Q. I'm referring to July 2, 2018.
A. Done where?
Q. Fourteen days ago at NYU.
A. Yes, I'm aware of that. In retrospect, I was not aware of that stress --
Q. Have you looked at records of that test?

A. I have.

Q. Have you looked what his blood pressure was?

A. I have not.

Q. You didn't look at what his blood pressure was?

A. No.

Q. Would it surprise you to learn it was 140?

A. No.

Q. It wouldn't surprise you?

A. No.

Q. Now, Mr. Ng next had a cardiac catheterization, also sometimes known as a cardiac angiogram?

A. That's correct.

Q. Around that time period, as standard practice NYU took a series of blood pressure readings of Mr. Ng?

A. That's correct.

Q. Have you reviewed those?

A. I have not.

Q. You haven't reviewed them?

A. No.

Q. Would it surprise you to learn that one was as low as 122?

A. It would not because oftentimes people are given sedation during a procedure like that, which artificially lowers the blood pressure.

Q. What if it was four days before procedure, would it then surprise you?

A. Again, no. Because blood pressures, as you had mentioned earlier, do vary from time to time.

Q. Would it surprise you if it also wasn't markedly higher than in the 140 range?

MR. PARK: Your Honor, I object.

THE COURT: Let's get specific.

Q. Let's look at Ng 27.

A. Yes.

Q. Page 2. You see it says BP readings from last three encounters?

A. Yes.

Q. You see it says July 5, 2018, 122 over 78?

A. That's correct.

Q. That's four days before the cardiac catheterization, right?

A. Sure. Yes.

Q. And then it says July 9.

Do you see that?

A. I do.

Q. 147 over 69.

A. Yes.

Q. Then July 12, 164 over 76.

A. I see that.

Q. July 12 was the day of Mr. Ng's discharge, is that right?

A. From the cardiac catheterization or from the stroke?

Q. From the hospital.

A. Which hospital admission are you referring to?

Q. Entirely. He left the hospital on July 12, 2018, right?

A. I'd have to go back because, remember, he has been hospitalized twice. I would have to go back and reconcile the dates.

Q. Why don't you go back to the first page.

A. Yes. That was the date of his discharge from the stroke hospitalization.

Q. Let's go back to the second page. That reading, 164 over 76, that's higher than 145?

A. That's correct.

Q. As is the reading of 147?

A. That is correct.

Q. Now, notwithstanding that, Mr. Ng was discharged from the hospital, correct?

A. That's correct.

Q. And his medications were not adjusted at that time for blood pressure, were they?

A. I had to actually advise the neurologist to adjust the medications, but that was not done, unfortunately.

Q. The medical team did not go with that recommendation?

A. They did not. And I should note that that blood pressure was taken when he was in the hospital getting all of his medications.

Q. Since his release, as you testified to earlier, Mr. Ng kept

a log, right?

A. As far as I know, yes.

Q. Let's go back to at least the part of the log that we have, NG 30.

MR. PARK: Your Honor, is this in evidence?

THE COURT: No, not yet.

MR. RICHENTHAL: We will happily put it into evidence. The government offers 30.

MR. PARK: No objection.

THE COURT: NG 30 is admitted in evidence.

(Government Exhibit NG 30 received in evidence)

Q. This log starts the day after he left the hospital, is that right?

A. That's correct.

Q. And it continues through earlier today?

A. That's correct.

Q. Now, the lowest systolic blood pressure on here is 123, is that right?

A. That's correct.

Q. And the highest is?

A. 197.

Q. 197.

A. Which is frighteningly high to me.

Q. I'm sorry, sir?

A. Which is frighteningly high to me.

Q. Fair to say it moved around from as low as 123 to as high as 197?

A. Absolutely fair.

Q. Have you examined Mr. Ng since he left the hospital?

A. I have not.

Q. Have you asked Mr. Ng to be examined by another doctor since he left the hospital?

A. I have not.

Q. Are you aware of a single medical measurement of blood pressure since he left the hospital?

A. I am not aware.

Q. Now, you got the call and you made a prescription for Norvasc?

A. Norvasc.

Q. 2.5 milligrams, right?

A. That's correct.

Q. That's the lowest dosage.

A. That's correct.

Q. You didn't them to go to the hospital?

A. I did not.

Q. You didn't give a higher dosage?

A. I was planning on eventually doing so, yes.

Q. Depending on the numbers?

A. Depending on the numbers.

Q. Now, Norvasc, that's taken also by millions of Americans,

right?

A. That's correct.

Q. It's well tolerated?

A. Pretty well.

Q. Standard medication?

A. Depending on how you define standard, but sure.

Q. It's been used for years by millions of Americans, right?

A. That's correct.

Q. That's also true for the other blood pressure medication Mr. Ng is on, is that right?

A. Avapro?

Q. Yes.

A. Less common.

Q. Still by millions of Americans, though, right?

A. Yes.

Q. You don't need any special training to give that prescription, do you?

A. You need to be a medical practitioner.

Q. Do you need to be a cardiologist?

A. No.

Q. In fact, because hypertension is so prevalent, it's something that all general practitioners are aware of, to your knowledge?

A. They are aware of the disease, yes.

Q. And they are aware of statins?

A. Yes.

Q. And hypertension drugs?

A. Yes.

Q. Now, when Mr. Ng left the hospital four days ago, the discharge report advises there is no limitations on his activities, isn't that right?

A. I'd have to go back and look at that. I am not responsible for that discharge paper.

Q. Why don't we look at Ng 27, page 1. That's the discharge report, right?

A. Yes.

Q. Could you go to the second page.

A. Um-hum.

Q. You see where it says recommendations?

A. Yes.

Q. These are based on the American Heart Association and American Stroke Association?

A. That is correct.

Q. You agree with those recommendations, right?

A. I agree with those recommendations for general people, yes.

Q. Could you look below that.

A. Um-hum.

Q. You see where it says activity?

A. Yeah, I see.

Q. It says you have no activity restrictions related to your

stroke?

A. I see that, yes.

Q. Please return to normal activities as you are comfortable.

A. I see that.

Q. The medical team came to that conclusion after Mr. Ng had his stents, right?

A. That's correct.

Q. And after he had his strokes, right?

A. That's correct.

Q. And after all of the procedures had been undertaken, right?

A. That's correct.

Q. And after all the tests had been undertaken, correct?

A. That's correct.

Q. You agree with that recommendation, do you not?

A. I actually do not.

Q. You don't?

A. I do not.

Q. Did you inform anyone of that?

A. He was discharged after I had seen him, so I was not aware of the discharge instructions.

Q. Now, you testified earlier that you think Mr. Ng needs more time because stress may cause negative things, right?

A. I don't think I said those words in particular.

Q. You talked about stress and the risk of what's known as stent thrombosis, right?

A. That's correct.

Q. Stent thrombosis is clotting that's connected to a stent, correct?

A. That's correct.

Q. A stent is essentially a device, it's a Teflon-coated small device inserted into an artery, correct?

A. It's not coated in Teflon. In these cases they are coated with drugs.

Q. Coated with drugs. It's inserted into an artery, right?

A. Correct.

Q. Let me be more precise. A balloon opens the artery, correct?

A. Yes.

Q. A stent is then placed in the artery to keep it open?

A. That's correct.

Q. And the reason a stent is coated, in this case with drugs, is to prevent clotting?

A. No. Is to prevent restenosis. Actually, the drugs that these stents are coated with prevent restenosis, which is where the artery goes through a process long term of what you consider like a scarring so the artery can close back up again slowly. So long term the drugs prevent that effect. However, they have actually been shown in several studies to increase the risk of thrombosis in the short term.

Q. Let me be more precise. Thrombosis is a clot, right?

A. That's correct.

Q. It's an acute cardiac event, it's a heart attack, correct?

A. If it happens in a coronary artery, yes.

Q. Stent thrombosis is a clot within the artery itself?

A. Within the stent within the artery, yes.

Q. And the risk of stent thrombosis is serious because that's a heart attack, correct?

A. Yes.

Q. That's not just some asymptomatic event?

A. That's correct.

Q. The overall risk of stent thrombosis is 1 percent or less, is that right?

A. That's correct.

Q. That is over the life of a stent?

A. That's over the life of a stent, but the majority of that risk is in the first couple of weeks.

Q. Between .5 percent and .8 percent. Would you agree with me?

A. Depending on which type of drug-eluting stent was used.

Q. In this case there is no indication whatsoever Mr. Ng has suffered from stent thrombosis, is there?

A. No.

Q. And there is no indication whatsoever he is at higher risk for it than anyone else who has the same stents, correct?

A. Except for his blood pressure.

Q. In what way, sir, does blood pressure increase stent thrombosis?

A. It increases the demand on the heart so that it can also cause the heart -- it can also increase the after load on the heart, the load on the heart, reduce the flow through the stent, and any stasis or flow through the stent can cause thrombosis.

Q. It's been one week since Mr. Ng had his stent?

A. That's correct.

Q. Have you examined him since then?

A. I examined him on the day of his discharge from the neurology stroke admission. I have not examined him since.

Q. The neurology stroke admission, these are punctate infrastrokes, right?

A. That's correct.

Q. In laymen's terms, they are tiny?

A. That's correct.

Q. And silent?

A. From a clinical significant standpoint, yes.

Q. Let's take them one at a time. Tiny meaning small?

A. Um-hum.

Q. And silent meaning asymptomatic?

A. Yes.

Q. They didn't cause Mr. Ng any symptoms?

A. As far as we know.

Q. As far as you know.

A. Again, I'm not a neurologist. I'm a cardiologist. The neurologist did agree that she felt that the symptoms that he was displaying at the time was not concordant with the location of where these strokes are.

Q. Do you have any basis to disagree with that assessment?

A. I don't.

Q. In short, Mr. Ng's stroke caused some plaque to go into the brain?

A. Not the stent itself, but probably the deployment device.

Q. The threading in order to get the stent.

A. That's right.

Q. Unless Mr. Ng gets another stent, that's done, right?

A. No. What do you mean, done?

Q. To the extent that the threading is what caused the plaque, that's not going to happen again unless he gets another stent, right?

A. That's true. I'm sorry. What do you mean, what's going to happen again?

Q. Something being threaded into his artery.

A. That's not going to happen again.

Q. That's not going to happen again?

A. That's not going to happen again.

Q. Overall, based on your examination of Mr. Ng, your assessment is that he should wait how long to surrender?

A. I think that anyone in his situation should refrain from stressful activity and from any sort of -- any sort of life event or life stressor that would adversely affect their blood pressure, heart rate and ability to take their medications for a period of two weeks.

Q. That would be one week from today?

A. That's correct.

Q. Now, can you go to 20A in evidence. It's been marked with a yellow sticky, 20A.

THE COURT: In the one that Mr. Park gave you, I think it's in there.

A. Are you referring to the letter from Dr. Attubato?

Q. Yes. Do you have that in front of you?

A. I can get it.

MR. PARK: Tab 4.

A. Yes.

Q. Now, you are aware, are you not, that Dr. Attubato withdraw his recommendation at the bottom of this letter?

MR. PARK: Objection.

THE COURT: I will allow it.

MR. PARK: Object to the form of the question as a stated fact. It's not in evidence.

THE COURT: Have you had conversations with Dr. Attubato?

THE WITNESS: Not about Mr. Ng, no.

THE COURT: And not about Government Exhibit 20A?

THE WITNESS: No.

Q. When Mr. Park asked you whether you agreed with the recommendation at the end of this letter you said generally yes?

A. Yes.

Q. Why do you say generally and not just yes?

A. Because it would go for any patient universally. It's not specific to Mr. Ng.

Q. So any patient undergoing a stent, you recommend they not engage in stressful activities for two weeks?

A. Absolutely. Especially if they have had a stroke afterwards.

Q. Again, sir, didn't you just testify that the stroke was caused by the stent?

A. Yes. But it also means that he has atherosclerotic plaque that is rife to also embolize again even without an inciting event, such as the insult of a device being threaded up there. I know this, again, based on the CT scan that shows an ulcerated plaque in his aorta.

Q. Has there been any evidence that anything like that that's happened in the past seven days?

A. No.

Q. Have you advised Mr. Ng to be examined by a cardiologist, assuming his motion is granted in the next seven days?

A. I was waiting to hear about the results of this hearing before I advised him to come and see me again.

Q. What exactly would you do if he saw you?

A. I would check his blood pressure, do a full neuro exam as best as can be done by a cardiologist, try to ascertain as best as I can whether or not he is taking his medications, and make further medication adjustments as needed. I would probably check his blood work just to be sure that everything was OK.

Q. Now, you testified that the risk of stent thrombosis is highest in the first two weeks?

A. That's correct.

Q. If you were to see Mr. Ng say tomorrow, that would be the beginning of the second week, correct?

A. That's correct.

Q. What in the list of things you just said you would do --

THE COURT: I know everybody wants to get through with the testimony. We just need to slow down a little bit.

Q. Dr. Pan, you testified to a series of steps you would take if you saw Mr. Ng?

A. Yes.

Q. Which of those would indicate to you whether he was going to have a stent thrombosis event?

A. By seeing him and asking him if he was having chest pain.

Q. So you would just ask him whether he is having chest pain?

A. That's correct.

Q. Did you ask his family, when you spoke with them this weekend, whether he was having chest pain?

A. I did not.

Q. You didn't ask?

A. I did not.

Q. If he said he was having chest pain, would there be a way to independently verify that?

A. Not at the moment, no. I guess I could ask the guards and other members of the family who are around him.

Q. Have you done that?

A. I have not done that because they had not told me that he was having any chest pain.

Q. You just said you didn't ask.

A. I did not ask and that is my fault, fair enough. But I know that family, his family is very good, and generally they tell me very quickly if he's having symptoms.

Q. Other than chest pain, self-reported chest pain, how, if at all, would you determine whether Mr. Ng is on the verge of a stent thrombosis event?

A. I mean, that would be it, whether he's having stuttering chest pain, so having on and off, again, chest pain, especially associated with exertion.

Q. Is it your understanding that Mr. Ng's stress will cease this evening if his motion is granted?

A. Absolutely not.

Q. Yet you recommend that his motion nevertheless be granted, is that right?

A. I am not making any recommendation with regarding the motion. I'm just making a recommendation that he be in as stress free an environment as possible for two weeks after his stent.

MR. RICHENTHAL: One moment, your Honor.

No further questions.

THE COURT: Doctor, I just want to see the text you were talking about.

MR. RICHENTHAL: I'm sorry. I would like to see those before I sit down.

THE COURT: Why don't you first show it to Mr. Richenthal and Mr. Park, and I'll take a look at it, also.

I'm handing the doctor's phone to Mr. Park and Mr. Richenthal so they can take a look at the text. It's actually a photograph of certain records.

MR. RICHENTHAL: Your Honor, may I ask Dr. Pan whether the attachment that we just took a photograph of contained text?

MR. PARK: The only question, your Honor, is whether that's the single page or there are multiple pages.

THE WITNESS: There are multiple pages.

THE COURT: There are three --

THE WITNESS: There are like four or five pages. I

apologize, your Honor. I had no idea that I was supposed to surrender this.

THE COURT: Do you have any questions?

MR. RICHENTHAL: Just a couple of small ones.

Q. Now, the records that we just looked at on your phone, is that what led you to change your recommendation from a few days without stress to two weeks without stress?

A. No.

Q. Has your recommendation always been two weeks?

A. It has.

Q. Did you have a conversation with Mr. Park on July 12? That's four days ago.

A. Referring to?

Q. Excuse me. Another one of Mr. Ng's counsel, Ms. Wang.

A. Again, a specific conversation you had in mind?

Q. Did you have a conversation about your anticipated testimony on Thursday, July 12?

A. In the hospital?

Q. Yes.

A. Yes.

Q. In that conversation did you not say to them that at most you are only willing to recommend a few days of rest after his discharge?

A. After his discharge, yes. That's correct.

Q. You said, at most, you are willing to only recommend a few

days after his discharge?

A. That's correct. Up to an additional week.

Q. It's now been four days, right?

A. That's correct.

Q. I'm asking whether it was the readings for blood pressure which led you to change your conclusion from a few days, at most, to another week?

A. Well, the few days that I meant at that time was up to the two weeks from the stent. I wasn't as specific as you may have liked. When I say a few days, I meant up to a week.

Q. You said, I can recommend, at most, a few days after discharge and what you meant was two weeks from the stent?

A. That's correct.

Q. And discharge again was four days ago?

A. That's correct.

Q. And the stent was seven days ago?

A. That's correct.

MR. RICHENTHAL: No further questions.

THE COURT: Redirect.

MR. PARK: Very briefly, your Honor.

REDIRECT EXAMINATION

BY MR. PARK:

Q. Dr. Pan, I am going to ask you to get back in front of you NG Exhibit 30, which is the list of the blood pressure readings that you were told about by Mr. Ng's family over the weekend.

A. Um-hum.

Q. Tell me when you are at that document. That is tab 8.

A. Yes.

Q. Just focus on the first page of that document now in evidence. There are 27 line items there, is that correct?

A. That's correct.

Q. And for each line item it reflects a different date and time of a blood pressure reading, is that right?

A. That is correct.

Q. And of the 27 different dates and times, how many of them are over 145?

A. I would say almost all of them except for line 18 and line 24. Except for two of them all of them are.

Q. With respect to the other dates and times, they are all in the range of 170, 180, 158, 160, is that correct?

A. I'm sorry. Which ones are you referring to?

Q. With respect to the others that are not -- that are, in fact, over 145.

A. They vary a bit, but there are many that are in the range of 170 to 190, yes.

Q. Now I am going to ask you to turn to NG Exhibit 27 that Mr. Richenthal asked you about on cross-examination. On page 2 in particular, toward the bottom of that page he directed your attention to the language: You have no activity restrictions related to your stroke. Please return to normal activities as

you are comfortable.

Do you see that?

A. That's correct.

Q. Do you recall Mr. Richenthal asking you cross-examination questions about that phrase?

A. I do.

Q. You said you did not agree with that particular statement, is that right?

A. Yes.

Q. And what did you mean by that?

A. What I meant by that -- you can actually make an argument that maybe I do agree with the wording the way it is. It actually says that you don't have any physical restrictions related to your stroke. The problem is, a lot of the physical limitations that I advised him is not related to the stroke so much but to the coronary stenting he had before.

You could make an argument that, based on that wording, it might be still consistent with the recommendations that I had made as well. And then it says, of course, that physical exertion as you feel comfortable, which I don't feel comfortable, but I'm not the patient.

Q. Would you consider being locked up in a federal penitentiary to be a normal activity, sir?

MR. RICHENTHAL: Objection.

A. I would hope not.

THE COURT: I will take judicial notice that it's not a normal thing for most people to be incarcerated.

MR. PARK: Thank you, your Honor. No further questions.

MR. RICHENTHAL: Very briefly.

THE COURT: OK. Limited to what was just asked.

MR. RICHENTHAL: Yes.

RECROSS EXAMINATION

BY MR. RICHENTHAL:

Q. In the hundreds of pages of medical records can you point us to a line that says there is a limitation on physical activities connected with Mr. Ng's stent?

A. It would go back to Dr. Attubato's letter. That would be the one. I don't have his discharge instructions from the stenting in front of me. They probably would have also made some discharge instructions after the stent, but we don't have them here.

Q. The answer other than Dr. Attubato's letter is, there isn't such a line in the records that you have reviewed?

A. Not in the records I have reviewed.

MR. RICHENTHAL: No further questions.

THE COURT: Thank you very much, Doctor. You may step down.

(Witness excused)

THE COURT: Why don't we take 10 minutes. It's 7:07.

We will come back at 7:17.

Mr. Park, let me confirm that Dr. Pan was your only witness.

MR. PARK: That's correct, your Honor.

THE COURT: We will resume and the government can put on its witness or witnesses, whatever they feel is appropriate.

We will stand adjourned.

(Recess)

THE COURT: The reason I wanted to ask the doctor whether he could see Mr. Ng tomorrow; in other words, my understanding of what he was saying is that his plan was to see him and adjust the medication. I am not sure why that isn't something that has not occurred yet, but that was the question I was going to ask Mr. Park, whether Mr. Ng could be seen tomorrow and have the exam the doctor talked about, during the follow-up that the doctor talked about.

Is the government ready to proceed?

MR. PARK: Judge, we will just e-mail him now and try to get that answer, so before the hearing closes.

THE COURT: Yes. And if he can't do it, why.

MR. PARK: Right.

THE COURT: Thank you.

We are ready to proceed.

MS. ECHENBERG: Thank you, your Honor. The government calls Stanley Schneller.

THE COURT: Dr. Schneller, if you could step up, please.

STANLEY J. SCHNELLER,

called as a witness by the Government,

having been duly sworn, testified as follows:

MS. ECHENBERG: As a logistical matter I have put on your Honor's bench some exhibits. The same binder is in front of Dr. Schneller and I have given a copy to defense counsel.

DIRECT EXAMINATION

BY MS. ECHENBERG:

Q. Dr. Schneller, can you please briefly describe your educational and professional background.

A. Yes. I graduated from Harvard Medical School in 1977. That's 41 years ago. After I graduated from medical school I came to New York to be an intern at Columbia Presbyterian Medical center. I was an intern junior resident, senior resident. And then in 1980, I was the chief medical resident at Columbia Presbyterian.

After that, I returned to Boston to do a cardiology fellowship at the Massachusetts General Hospital where I was for four years. And at the completion of that training I was board certified both in internal medicine and in cardiovascular diseases.

I came back to New York to join the faculty of the College of Physicians and Surgeons of Columbia University, and

I have been in that position for the past 33 years. At Columbia I have a very large and busy practice of cardiology where I see patients with the full spectrum of heart disease, meaning coronary artery disease, as in this case, atherosclerosis, valvular heart disease, heart failure, disorders of cardiac rhythm and conduction, and the associated diseases that are related to heart disease, like hypertension, diabetes, cerebrovascular disease, stroke, peripheral vascular disease.

I also implant pacemakers and defibrillators for specific disorders of cardiac rhythm.

In addition to that busy practice, which is an everyday activity both in the office and in the hospital, because my office is geographically at the medical center, I also teach and I've taught medical students, interns, residents, cardiology fellows and advanced trainees throughout that time. I started at Columbia 33 years ago. I'm now a full professor of medicine, and I have an endowed professorship as well, which is called the Irving Professorship of Cardiology.

MS. ECHENBERG: Your Honor, we have marked as Government Exhibit 83 Dr. Schneller's résumé. It's up on the screen and I believe we put a copy in the Court's binder. We would move to admit --

Q. First, Dr. Schneller, is this a copy of your résumé?

A. Yes, it is.

MS. ECHENBERG: We would move to move Exhibit 83.

MR. BAUER: No objection.

THE COURT: Government Exhibit 83 is admitted in evidence.

(Government Exhibit 83 received in evidence)

Q. Dr. Schneller, what does it mean to have a specialty in cardiology?

A. A specialty in cardiology is a subspecialty of internal medicine, which is involved in diseases of the heart and the cardiovascular system in general. To achieve that, the candidate must fulfill certain years of training to the satisfaction of the people in charge of the program and pass a qualifying examination which I took decades ago.

Q. I believe you mentioned, or maybe you didn't, are you board certified?

A. Yes, I'm board certified in internal medicine and in cardiology. I have a practice which is mostly cardiology, but within that I also see patients with internal medicine problems.

Q. What does it mean to be board certified in internal medicine?

A. Internal medicine also requires that the candidate fulfill a certain number of years of training, as well as pass a qualifying examination. In order to be a subspecialist one has to first pass the internal medicine board certification.

Q. And just for a lay person, what is internal medicine? What does it cover?

A. Internal medicine refers to the diseases that affect the internal organs of the body. So not just the heart, but the liver, the lungs, the kidneys, the brain, the endocrine system.

Q. You mentioned that you see patients both for cardiology issues and also for internal medicine?

A. Yes, I do. About 85 percent or 90 percent of my practice is cardiology, but I care for the noncardiovascular problems that those patients have, and probably about 10 or 15 percent of my practice is pure internal medicine, usually the families of my heart patients and a substantial number of Columbia faculty who don't have heart disease, but just want me to be their doctor.

Q. Can you describe your experience over your long medical career in reviewing medical records?

A. I've been reviewing medical records for four decades. It's a daily activity, yes.

Q. What types of medical records are you comfortable reviewing?

A. Well, I review medical records of all of my patients on the teaching service of countless patients at the hospital, of patients of other physicians in the hospital. For example, I was on call this weekend covering for six cardiologists, and I reviewed the medical records of probably 35 patients for whom I

was responsible just for the weekend. But that's just on top of the daily practice of a busy cardiologist and a teacher would be, to be very familiar with medical records of all kinds.

Q. Have you ever served as a medical expert in litigation before?

A. Yes.

Q. How many times?

A. I have testified in court over 30 years probably 50 times. I don't know that for sure. I have not tabulated, but that would be my estimate.

Q. And over those approximately 30 times, have you testified for one side or the other or both?

A. No. I've testified both for the defense and for the plaintiff. These are typically in medical malpractice situations. But for both sides, yes.

Q. And have you ever been qualified as an expert?

A. Yes, I have.

Q. Have you ever testified in federal court?

A. Yes, I have.

Q. And been qualified as an expert there?

A. Yes.

MS. ECHENBERG: The government moves to qualify Mr. Schneller as an expert.

MR. PARK: No objection.

THE COURT: In cardiology and internal medicine?

MS. ECHENBERG: Yes, your Honor.

THE COURT: The doctor can testify as an expert in cardiology and internal medicine.

You may proceed.

Q. Have you reviewed medical records in connection with an individual named Ng Lap Seng?

A. Yes, I have.

Q. As a general matter, can you describe the records that you have reviewed?

A. Yes. I reviewed the outpatient records of Dr. Pan, the Elitra records where he went for a screening examination, the results of two stress tests, one at Elitra, I think that's the name, another one performed after a visit with doctor Dr. Mannino and interpreted by Dr. Kosta. Then the NYU chart, which includes the hospitalization for the stent implantation on July 9, and then the readmission on the 10th through the 12th.

Q. Did you review all of the NYU records during that 10th through 12 --

A. Yes. And I reviewed Dr. Pan's records back to his first visit in 2015, up to and including the records of the outpatient blood pressure records that were sent to him.

Q. And having reviewed those records, do you believe there is anything additional that you would learn from evaluating Ng Lap

Seng himself that would be relevant to your medical opinion beyond the records that you've already reviewed?

MR. PARK: Objection, your Honor. Vague.

THE COURT: I'll allow it. Overruled.

A. If you mean by that meeting him, interviewing him and performing a physical examination, the answer is no.

Q. Why is that?

A. Well, because I believe I have voluminous information on his medical history entirely sufficient for me to understand his condition comprehensively and form opinions to a reasonable degree of medical certainty on his medical condition and its treatment and its prognosis. In this particular case we not only have office visits, we have echocardiograms, we have stress tests, we have a cardiac catheterization, which is the most definitive way to invasively evaluate the heart, so there is ample evidence for me to base my conclusions.

Q. I'd like to direct your attention to July 9 of 2018. You were here while Dr. Pan testified, is that right?

A. Yes.

Q. And he spoke about a stent procedure that Mr. Ng had on that day. Do you recall that?

A. I do.

Q. And have you reviewed records related to that procedure?

A. Yes.

Q. Based on the records you reviewed related to that

procedure, what is your understanding of the treatment going forward for Mr. Ng for that procedure?

A. With respect to the treatment after the stent, it is really the continued administration of dual antiplatelet therapy, namely, daily aspirin and daily Plavix. Those medicines are important to prevent stent thrombosis and those medicines need to be continued for a period of approximately a year to 18 months. That's the most important thing that can be done for this patient and for any patient to prevent stent thrombosis.

So a very narrow answer to the question is that he needs to take his medicines. That also applies, of course, to the treatment of his high blood pressure. He needs to take his blood pressure medicines. He needs to take his medicines for his diabetes and, of course, it would be advisable for him to stop smoking.

Q. Focusing specifically on the stent procedure and the dual antiplatelet medication, has he been prescribed those medications?

A. Oh, yes.

Q. And who can treat Mr. Ng going forward if he needs any treatment regarding the ongoing medications?

A. Well, for the diabetes and for the hypertension, that can be done by any medical practitioner. That can be done by a general practitioner, by an internist. Frequently in the present era it is done by a nurse practitioner. With respect

to the cardiology, that doctor, whoever it would be, would make sure that the prescriptions were refilled. Because the patient --

MR. PARK: Objection. Nonresponsive, your Honor.

Q. Let me ask you a more specific question.

THE COURT: Go ahead.

Q. Am I correct in understanding your testimony that the main concern going forward from a cardiologist's perspective related to the stent is that he continued to take the prescribed medications and get the prescriptions renewed, if necessary?

A. That is precisely correct, and any doctor can do that.

Q. And just focusing on the stent procedure, do you have any reason to believe, in your medical opinion, that Mr. Ng cannot surrender to prison based on the stent procedure?

A. No. There is no medical reason he could not be incarcerated based on the stent procedure.

Q. Why not?

A. Because the risk of stent thrombosis is 1 percent or less. The period of highest risk is about a week. It's essentially passed. But that risk of about 1 percent persists for the whole year. And even after the first or second year it never goes down to zero.

In order to understand that, it's important to understand that coronary disease is highly prevalent, that percutaneous coronary intervention, the implantation of a stent

is one of the most commonly performed procedures in all of medicine. And in medicine, a 99 percent problem-free rate is about as good as it gets.

So because there is a less than 1 percent risk of stent thrombosis, most dependent only on whether the patient will swallow the pills, the patient can go to work, travel, or go to prison, as the case may be, that the risk of stent thrombosis is independent of those factors. In particular, the risk of stent thrombosis is not related to travel and is not related to stress. The risk of stent thrombosis is related to taking the medicines.

Q. I want to come back to thrombosis in a moment. I want to ask you just a few questions about the stent procedure itself. Is that a procedure you are familiar with?

A. Yes.

Q. And how common is that procedure?

A. A stent procedure is one of the most commonly performed procedures in all of medicine. I cannot come up with a number, but 16.5 million Americans have coronary disease and stenting is a very common way to treat narrowed coronary arteries. At my hospital, which has a cath lab which is very busy and open from 8 to 10:00 at night, approximately, probably 30 to 50 stent procedures are done every day.

Q. Are you familiar with the term cath report or catheterization report?

A. Yes.

Q. What is that?

A. That is simply a document that describes the procedure that is performed on a patient undergoing a cardiac catheterization procedure.

Q. Have you reviewed the cath report for Mr. Ng for his procedure?

A. Yes.

Q. If I could direct you to NG Exhibit 20 in your binder.

MS. ECHENBERG: Your Honor, I am not sure if this was admitted. If it wasn't, we would move to admit it.

THE COURT: Any objection?

MR. PARK: No, your Honor.

THE COURT: NG Exhibit 20 is admitted in evidence.

(Government Exhibit Ng 20 received in evidence)

THE COURT: I am not sure if it's the same.

MS. ECHENBERG: It may have been, your Honor.

Q. Dr. Schneller, you reviewed this report?

A. Yes.

Q. And what was your understanding, having reviewed this report, of Mr. Ng's condition after the stents were implanted?

A. Because the stent procedure was completely successful, after the procedure, there was normal blood flow through every artery in his heart.

Q. And have you reviewed any other records regarding the

functioning of Mr. Ng's heart?

A. There is an echocardiogram, which is an ultrasound test that takes a picture of the heart that shows that the contractile ability of the heart, as measured by something called the ejection fraction, is completely normal. So the patient's heart functions normally as a pump based on the echocardiogram. And based on the results of the catheterization and stenting procedure, all the arteries are open and the blood flow is normal.

Q. If I could direct you now to Exhibit NG 26 and page 2 of that document. It's actually the third page. There is a cover page, but it's page 2 at the bottom.

Do you see that?

A. I do.

Q. Is this the EKG results that you were referring to?

A. This is the echocardiogram result I was referring to.

Q. Does this say anything about the ability of Mr. Ng's heart to pump?

A. Yes. It says: Under echocardiographic findings: Resting LVEF, which stands for left ventricular ejection fraction, that is, the percent of blood ejected by the left ventricle. The left ventricle is the squeezing chamber of the heart and that number is 68 percent. Normal is 55 to 65 or so. That's a normal number. So 68 is normal, a little bit above normal, but basically it's just normal.

Q. Between that result and the result of the stent, again, what is the condition of his heart, in your medical opinion?
A. The condition of the heart is, I would break it down as a cardiologist into two parts. The squeezing ability is completely normal, and there is no obstruction of blood flow through any artery in the heart. So the stenting procedure was an unqualified success. Drug-eluting stents, which are highly reliable, were implanted. So the heart squeezes normally. There has never been any damage to the heart, and the arteries are now all open.
Q. How soon after the stent procedure was Mr. Ng released from the hospital?
A. Eight hours.
Q. Based on having reviewed his full record, are you aware of him having any cardiac complications after the stent?
A. He had no cardiac complications after the stent.
Q. I want to turn now to the stent thrombosis that Dr. Pan spoke about. You've already mentioned that there is a 1 percent chance of stent thrombosis. I want to turn back to something you were saying just now. Is that risk increased by stress?
A. No. There is no reason to believe nor is there any evidence to support the concept that stress increases the risk of stent thrombosis. There are things that increase the risk of stent thrombosis. Stress is not one of them.

Q. What increases the risk of stent thrombosis?

A. The most important cause of stent thrombosis is failing to take dual antiplatelet therapy. Any interruption in one or both of those drugs may precipitate stent thrombosis.

Other factors have to do with the anatomy of the heart. They have to do with procedural issues, failure to inflate the balloon maximally, they have to do with certain anomalies of anatomy, long stents, difficult anatomical problems, failure to administer antiplatelet therapy prior to the deployment of the stent. So there are factors which are already excluded by the details of the catheterization procedure in the records.

Q. Why do you say those are already excluded?

A. Because this was a straightforward procedure, as described in the medical record, with an excellent an graphic result, as is stated for both vessels after the procedure. Specifically it says -- there is a term of art in the record where it talks about TIMI flow, if we can just refer to that again. Is that 20?

Q. The catheterization report. NG 20.

A. After the first intervention it says: There was an excellent angiographic result. The postinterventional distal flow is normal. In parenthesis it says TIMI 3, which is a term of art meaning normal, and there is no residual stenosis postintervention. The same terminology is repeated after the

second vessel was opened. So this was an entirely straightforward procedure which I think was also reflected in the fact that the patient was discharged eight hours after the procedure.

THE COURT: Doctor, what exhibit number are you looking at?

THE WITNESS: This is 20.

THE COURT: Exhibit 20, page.

THE WITNESS: Page 3. I am referring to these sentences here that says there was an excellent angiographic result. Post interventional distal, meaning forward, to the end of the vessel flow is normal. No residual stenosis or narrowing.

The second lesion is described in the same way.

THE COURT: That's Exhibit 20, bottom of the page, and then the second reference is on the bottom of page 3 and the second page is on page 4. Go ahead.

A. And the other thing that we learn from the cath report is that the other vessels are not significantly narrowed. So the intervention was done in two branches of one vessel and the other vessels were not significantly narrowed. Blood flow is unlimited in all of the vessels of the heart.

Q. Dr. Schneller, now that we are one week out from the stent procedure, do you expect there to be any change in the risk of stent thrombosis between today and one week from now?

A. No. Only that I think the risk -- the maximal risk time has passed. But whether it's 1 percent or slightly less than 1 percent, it's not a substantive change.

Q. I want to direct you now to a letter that the defense has marked as Government Exhibit 20A. I believe it's at the end of Government Exhibit 20 in your binder, if you could refer to that.

MS. ECHENBERG: For the record, we are referring to Government Exhibit 20A. Excuse me. In Exhibit 20A.

Q. Mr. Schneller, are you familiar with this letter?

A. Yes.

Q. And did you speak to Dr. Attubato about this letter?

A. Yes. I was on the phone when there was a conversation with Dr. Attubato, and I spoke to him.

Q. How, if at all, did Dr. Attubato's position or positions taken in this letter change as a result of that phone call?

A. It changed in the following way. During the conversation he acknowledged that the greatest risk of stent thrombosis is actually in the first week. Second, he said that he agreed that stress was not something that would cause or increase the risk that the stent would thrombose.

Then he also said that although in his letter he advised against travel, he modified that to say that he advised against air travel, but travel by automobile would be acceptable because that would not increase the risk of stent

thrombosis.

He made another point, because I do remember the conversation. He further said that as an interventional cardiologist, meaning a procedure-performing cardiologist, he never expected to see the patient again and that the follow-up, in his opinion, did not need to be done either at NYU or any particular place, but could be done by any physician.

Q. And do you agree with all of those statements?

A. Yes.

Q. And do you see at the end of the letter there is a reference to close proximity to a major medical center with appropriate facilities?

A. Yes.

Q. What is your medical opinion of that statement?

A. Well, it does not comport with the general recommendations that I give to patients who have a stent and, I believe, to any recommendations that I've seen in all of the experience I've had since stenting was first developed.

Patients are not asked to reside close to a cardiac cath lab. They are not advised to be minutes away from a facility that can treat a stent thrombosis. The risk of stent thrombosis is extremely low. It is less than 1 percent and patients are advised to go back to work, to resume any normal activity that they would do. And the concept that the patient needs to be close to a major medical center is not a typical

recommendation, and I believe that in the conversation that I remember having with the doctor, when he did agree that the follow-up really could be done by any doctor, I think implicit in that was that he was also withdrawing that comment, which would be an unusual recommendation to make to a patient because we do not tell our patients after a stent, particularly a successful stent like this, in a patient who has a normal left ventricle, that you need to stay near a cath lab.

Q. Do you recall whether Dr. Attubato said anything about who asked for this letter?

A. I believe it was -- I think he said he was asked to write the letter by the attorneys, I believe.

Q. And do you recall when Dr. Pan was testifying he said that a stent thrombosis, the symptom of a stent thrombosis would be stuttering chest pain or on-and-off chest pain?

A. Yes.

Q. Is that your understanding?

A. No.

Q. What is your understanding?

A. A stent thrombosis, we have to understand, is a catastrophe. It is when the stent actually clots. That means that the vessel is closing. The typical scenario, happily, it is very, very rare. But stent thrombosis, usually if it's going to occur, it's going to occur with sudden unheralded excruciating chest pain, not stuttering pain, and typically

will result in either a major heart attack or a fatality because stent thrombosis really requires that to reverse it not only must a balloon be inflated in the artery, but it must be inflated in the artery really within minutes; at most, an hour to 90 minutes.

So it is not something that when it happens is slow stuttering or something that one would have to ask the patient, are you having chest pain. That refers to normal narrowing of a normal or native coronary artery, an artery that has not been intervened on, like a 70 percent narrowing, gradually getting to 80 or 90. That patient may say, when I walk in the street up a hill in a cold wind, I get chest pain. That is something that the patient may not volunteer. The doctor has to inquire. But that doesn't apply to stent thrombosis.

Q. What is the recommendation that you give to your patients about what they can or can't do after a stent?

A. Well, the recommendations that I give is that I don't want the patient really, and this comes up frequently, I don't want the patient to travel to a third-world country because they are going to be completely remote from medical attention at all. I recently advised a patient, no, don't go on safari. But we don't advise patients not to travel from city to city or not to return to work, to any kind of occupation, whether the patient is an attorney, a business person, a doctor, or any kind of activity. So activity is not limited.

And the issue of stress really almost never comes up because as a practicing doctor I understand that to recommend that a patient avoid stress, which would be irrelevant in this case anyway, because stress does not cause stent thrombosis, but a patient can never be rendered distant from stress because everybody will find stress in their own way in diverse circumstances. But the whole issue of stress, which I'm referring to only because Dr. Pan testified to it, really has nothing to do with stent thrombosis.

Q. I want to turn now to Mr. Ng's second hospitalization, which would be July 10 and July 12.

Have you reviewed the records related to that hospitalization?

A. Yes, I have.

Q. I want to refer you now to Government Exhibit 81 in the back of your binder.

Do you recognize this document?

A. Yes.

Q. What is it, just generally?

A. This is the final note by Dr. Zhang, who was the neurologist who cared for the patient during the hospitalization from 7/10 to 7/12. Dr. Zhang is a stroke specialist and that's what it means when it says neurovascular service. That is a neurologist who specializes in stroke.

MS. ECHENBERG: The government moves to admit

Government Exhibit 81.

THE COURT: Any objection?

Mr. Park, do you have it?

MR. PARK: I do, your Honor. And no objection.

THE COURT: Government Exhibit 81 is admitted in evidence.

(Government Exhibit 81 received in evidence)

MS. ECHENBERG: Thank you, your Honor.

Q. If you could just briefly describe the conclusions of this report.

A. Sure. The patient came to the hospital a day after the stent procedure with symptoms that, according to this note, which I will return to, were determined by Dr. Zhang, as he indicates in this note, to be not neurologic but, rather, related to a problem in the inner ear.

I refer to, on page 64, under assessment his second paragraph which says: The combination of tinnitus, which is a medical term that means ringing in the rear, vertigo, which means dizziness, and hearing loss, which he reported yesterday, are suggestive of Meniere's disease, which can be managed as an outpatient. At this time his inpatient workup is complete and, based on today's exam, he is stable for discharge.

So that simply means that the symptoms for which the patient came to the hospital were ultimately determined to be due to an inner ear problem. But before that diagnosis was

made, the patient was subjected to a neurological evaluation trying to determine whether his symptoms were due to a stroke. And in the context of that evaluation, an MRI was done, which showed three punctate, which means tiny, infarcts in the brain.

And Dr. Zhang, the neurovascular neurologist, says the following about that, and that is, under his assessment, in the first paragraph it says: Found to have three punctate embolic-appearing acute infarcts on MRI brain. These strokes are clinically silent, most likely periprocedural, related to his PCI the day prior and do not account for his neurologic symptoms.

Q. Dr. Schneller, I want to stop you there because I want to break that down.

A. I need to explain it. I know.

Q. You may recall Dr. Pan talked about Mr. Ng's stroke. Is this what he was referring to?

A. Yes.

Q. If you can describe for the judge what it means for a stroke to be clinically silent.

A. Sure. Normally, when the word stroke is used, it is not used to describe anything that is clinically silent. Usually, a stroke means a major portion of the brain has been killed and the functions that that part of the brain are responsible for no longer work. So there would be paralysis of one side of the body or there would be an inability to articulate or an

inability to find words or express one's thoughts. That's called an aphasia. That is not clinically silent. That is what we mean when we typically talk about a stroke. This is not like that at all.

This is a patient who comes to the hospital for symptoms that are ultimately determined to be due to his inner ear, but gets an MRI scan, and that MRI scan happens to be done one day after a catheter has been put through his arterial system.

So the conclusion of the neurovascular neurologist, with which I completely agree, is that during the procedure, when a catheter, a plastic tube and a guide wire were inserted up through the aorta into the heart, the atherosclerosis that is present in the aorta, a little particle or three little articles were broken off and they traveled in the direction of the blood flow straight up to the brain, and these tiny particles lodged in the smallest vessel that they could get to because that's where they stopped, and that's what the MRI scan means when it says punctate. It means tiny. Clinically silent means they cause no symptoms. And the fact that they don't cause this patient symptoms follows from that because they are clinically silent and didn't injure any identifiable area of the brain that does anything, happily, for this patient.

But what that means is, we learn about this, meaning the doctors who did this MRI scan learned about this because

they were trying to figure out whether his symptoms were due to a stroke and, in fact, they found the symptoms were not due to a stroke, but they did find these three punctate lesions.

Now, we very rarely are in a position in medicine to do an MRI scan the day after a stent procedure. There are a few studies that have looked at that. And if you actually look at that in a study, you can find in one study 20 percent of patients who have had a stent procedure will have microemboli to the brain, clinically silent, but detectable. It has no clinical consequence, but you can find it if you happen to do an MRI so soon after a procedure.

In order to prevent this from happening, meaning if a doctor was worried that this would happen again -- and the one thing I agree with Dr. Pan is, it's not going to happen again because he's not likely to have a catheter going up his aorta again.

But the most that could be done to reduce that risk would be to say to the patient, take aspirin and, by the way, also take Plavix. But this patient needs to take those medicines for his stents, anyway. So he is as protected as any patient could be from vanishing the unlikely possibility that this could be recurrent.

Q. So after the MRI of the brain ruled out that there were any neurological causes for the symptoms he came to the hospital with, what happened next?

A. Then the doctors did an MRI of the spine just to be sure that there was not some abnormality in the spine that could cause his symptoms, and that MRI of the spine showed that the patient had degenerative disease of the spine, something we call cervical spine disease and spinal stenosis.

And during the hospitalization, which is referred to in Dr. Zhang's note on the first page, page 62, where he says, under timeline of events, Dr. Zhang writes: MRI cervical spine showed multilevel degenerative disease without cord compression, meaning although he has got degenerative disease, it's not bothering his spinal cord, seen by neurosurgery, even meaning by the neurosurgeons, do not see need for surgical intervention.

And what that means is that when they found this abnormality in the spine, they consulted the neurosurgeons to determine whether there was an operation that they thought was necessary and their answer was no. And that's not surprising for a variety of reasons.

One is, the disease is not bad enough to do neurosurgery for. Two, this man needs to be on dual antiplatelet therapy for at least a year, and probably 18 months and longer, and you cannot have surgery when you are on dual antiplatelet therapy because if you have surgery we have to stop the dual antiplatelet surgery and then the stent may thrombose. That is not something that is going to be done

medically. The treatment of this spine condition is an analgesia, medicines like Motrin and keep walking.

Q. Just to summarize with regard to the stent, with regard to the three punctate emboli, the treatment is the medications he is already on?

A. Already on anyway for a different reason, yes.

Q. And the treatment for what they found with regard to the spine, the spinal stenosis is Motrin and walking?

A. Yes.

Q. I would direct you now to NG 27, which I believe is already in evidence.

Do you recognize this document?

A. I do.

Q. What is it?

A. These are the discharge instructions from NYU when he was discharged on the 12th of July.

Q. And what were the discharge instructions in sum?

A. The discharge instructions really contain an explanation for the benefit of the patient of the findings. So they repeat that. It says here: Your strokes are most likely from your percutaneous coronary intervention with drug-eluting stents and do not account for your present neurologic symptoms.

Q. I can stop you there. Can you just tell us what that means?

A. That just means that, basically, as I said, these punctate

lesions in the brain were found incidentally. They have nothing to do with any symptom. They are clinically silent. They are tiny and they are basically explaining that to the patient in the discharge instructions that they had nothing to do with his symptoms, period.

The other instructions have to do with the medication he needs to take. Obviously, he is already on these diabetes medicines. They recommend that the patient lose weight. They have recommended that he continue his Crestor. They recommend that the blood pressure be treated with a medicine that he is already on and it says here: You should work with your primary care physician and/or cardiologist in order to achieve a goal blood pressure under 140 over 90. It tells him to stop smoking. It tells him that there are no activity restrictions. Please return to normal activities as you are comfortable. And that's basically it. It's a reiteration of routine medical advice and the importance of stopping smoking and taking medications and seeing your doctor in follow-up.

Q. If I can refer you to the first page. I think you referenced it briefly. I think it says you've been diagnosed with Meniere's disease. Can you explain what that is?

A. Meniere's disease is what the neurologist thought was responsible for the symptoms that he actually went to the hospital for. Meniere's disease is, as it says here, a chronic recurring condition due to an abnormality localized in the

inner ear. It can result in diminished hearing, it can result in ringing in the ears. It is unpleasant for the patient. It is not threatening in any way. And there is no risk to Meniere's disease other than the unpleasantness of the symptoms, and there are certain medications that were prescribed to the patient to try to alleviate those symptoms. But it is of a different order of magnitude from the cardiac issue that we were discussing, which was treated, but Meniere's disease is really the reassuring finding that explains his neurologic symptoms because it's really not a brain problem.

MS. ECHENBERG: Your Honor, I want to show the witness one additional document. I just want to confirm that we can bring Government Exhibit 82 up on the screen.

I am going to approach the witness, if that's OK, and we will bring up a copy on the screen for everyone else.

THE COURT: OK.

MS. ECHENBERG: Unless we have other paper copies.

Q. Dr. Schneller, are you familiar with this document?

A. Yes.

Q. What is it?

A. This was a note by a medical resident during the patient's hospitalization.

Q. And what, if any, conclusions were there from this note?

A. It reiterates what we have already said. It says: Neurologists does not believe that these strokes correlate with

his current symptoms. It also says that after talking to the patient with the aid of a translator that the patient has multiple complaints and is very tangential. I'm quoting. He states that he has a terrible intermittent headache with ear ringing. He has intermittent chest pain that occurs at night, not with exertion. That means it's atypical because heart pain usually occurs with exertion.

Q. Can you read the last line of that paragraph.

A. Yes. The last line of that paragraph is he repeatedly states that he wants to stay in the hospital for another five to 10 days just to make sure that he is well.

MS. ECHENBERG: Your Honor, I should have done this from the beginning. The government offers Government Exhibit 82.

MR. PARK: No objection.

THE COURT: Government Exhibit 82 is admitted in evidence.

(Government Exhibit 82 received in evidence)

Q. I want to turn now, Dr. Schneller, to Mr. Ng's blood pressure and the discussion that Dr. Pan had about his blood pressure.

First of all, what was Mr. Ng's blood pressure at discharge from the hospital? If you want to refer to NG 27.

A. As I recall, it was something like 160 over -- I don't remember what the diastolic was.

Q. You want to look at Ng 27, the second page.
A. The last blood pressure was 164 over 76.
Q. Did that blood pressure prevent Mr. Ng from being discharged from the hospital?
A. No.
Q. Why not?
A. I agree with the doctors at NYU that that is not a blood pressure that requires continued hospitalization because the treatment of hypertension, particularly in a patient who has had hypertension for 20 years, is really a matter of outpatient management. The blood pressure is labile, which is a medical term that just means it fluctuates, it varies.

And as you can see from that document, at other times the blood pressure was substantially lower than that. In particular, the diastolic is 76, which is a normal diastolic. It's only the systolic which is somewhat elevated. And this is something that can and would, under normal circumstances, be managed by a primary care doctor in the outpatient setting, whether or not another medicine needed to be added or the dose suggested is something that could be figured out in the future.

Q. If you could just summarize for the Court the range and records that you reviewed, the date range specifically of blood pressure readings that you have seen in Mr. Ng's medical records?
A. For what range?

Q. The date range. How many different blood pressure readings have you seen?

A. There are many blood pressure readings throughout the entire medical chart, both in Dr. Pan's office and during the NYU hospitalization and at the Elitra evaluation. Yes. There were many blood pressure measurements.

Q. Did those measurements go back to 2015?

A. Yes.

Q. You may remember NG 30, which should be in your binder. Do you recall a discussion of those records, those more recent records?

A. Yes.

Q. Having reviewed all of those records from 2015 through I believe just yesterday or today, how would you characterize Mr. Ng's hypertension?

A. Mr. Ng has a long history, a 20-year history of hypertension. And it is mostly borderline and labile, meaning it fluctuates. Dr. Pan repeatedly noted that it was elevated when the patient didn't take his medications. That's not surprising.

It's also true that tobacco substantially increases the blood pressure, so if he was using tobacco at a time that the blood pressure was measured, tobacco can cause a labile blood pressure to be increased. So it's basically, to me, labile hypertension, which is an extremely common problem.

As I said, 70 percent of Americans over the age of 65 have hypertension. This seems to me to be typical hypertension that would be treated in the standard way, which is by adjusting medications.

What is notable to me is that this patient with borderline hypertension for a long time is on single medicine, Avapro, irbesartan, for his blood pressure. It's a perfectly reasonable medicine.

But many, many patients who have hypertension, even labile hypertension, need to have more than one medicine and in that case they get a second medicine.

Finally, this patient has been prescribed the lowest dose of amlodipine, Norvasc, another perfectly reasonable medicine, usually very well tolerated, to aid in the more optimal control of his blood pressure.

If the 2.5 milligram dose is insufficient, it can be advanced to five milligrams, to 7.5 milligrams or to 10 milligrams.

If the combination of irbesartan and Norvasc does not work, there are multiplicity of other medications also well tolerated that could be added and adjusted. That is done by primary care doctors, nurse practitioners, general practitioners, or internists. It does not need to be done by a cardiologist, although it could be done by a cardiologist.

Q. In your opinion, does it need to be done by Dr. Pan?

A. Certainly not.

Q. Why not?

A. There is no particular doctor. There is no particular doctor, not even a professor of cardiology, who is uniquely qualified to adjust antihypertensive medicines in this context. This is garden-variety bread and butter medicine.

Q. I believe you said a nurse practitioner could also adjust those medications?

A. Oh, yes. Nurse practitioners now, who are independent of physicians, can, with complete competence, adjust medications for blood pressure because as all physicians would know, if there is a particularly difficult case, they can always get subspecialty expertise, but there is nothing about these blood pressures and about the hypertension in this patient that would suggest that that would be necessary at all, nor is there any reason to believe that this patient doesn't have anything other than what is called essential hypertension, meaning he has just got high blood pressure. There is no obscure cause for it that would be investigated certainly at his age. The only important thing about his blood pressure is that the medicines ultimately be adjusted to make it optimal and that can be done by any practitioner in any setting.

Q. Do you recall that Dr. Pan testified that Mr. Ng has sustained high blood pressure?

A. Yes.

Q. Do you agree with that?

A. No. It's really labile hypertension. Obviously, these records of the 190 are the highest blood pressures we have seen. He certainly didn't have 190 in the hospital. I think it's labile. To the extent that the outpatient numbers are reliable, and I am not sure that they are. But it may be that he just needs the change in the medicine that Dr. Pan did, which means to finally add another medicine and that medicine may need to be adjusted in the future.

Q. When you say the outpatient records may be reliable or not, what records are you referring to?

A. I'm simply referring to those records of his home blood pressure monitoring.

Q. Do you believe they might not be reliable?

A. They may or may not be.

MR. PARK: Objection. Calls for speculation, your Honor.

MR. RICHENTHAL: He's an expert.

THE COURT: I'll allow it. I will hear his opinion on this.

A. In my experience, outpatient measurements done by nonmedical people are frequently not reliable. Most patients actually ask, can I please bring my blood pressure machine in so that you can check it. Because what I'm getting at home does not comport with what my doctors are getting. It's a

common circumstance to find that the blood pressure is not checked correctly, the cuff is wrong. There is a variety of things that can go wrong even though taking blood pressure is relatively simple. It should be done by a nurse or a nurse practitioner or a doctor. So I would have some doubt about this. But Dr. Pan's decision to add Norvasc is perfectly reasonable and any doctor can pick up on that subsequently.

Q. I believe Dr. Pan testified about a blood pressure spike that could cause bleeding in the brain.

Do you recall that?

A. Yes.

Q. What is your view of that testimony?

A. My feeling is that really is not -- that can give a false impression. It is true that extreme hypertension can result in hemorrhagic stroke or sustained, meaning long-term untreated hypertension that rises to very high levels that can cause hemorrhagic stroke. There is no argument that control of blood pressure is important to reduce the risk of a stroke, but it has nothing to do with the kind of stroke that this man had, which is not really a stroke in the way we usually understand it because it was this inadvertent discovery of emboli that can occur in many patients who have procedures, so one thing has nothing to do with the other.

But there is no argument that this man should have his blood pressure optimized. But to invoke the possibility of a

hemorrhagic stroke as a reason for it is really, it's such an unlikely event with these kind of blood pressures that I think no reasonable doctor would worry about that or explain that to his patient, even a patient that you were trying to encourage to take the medicine.

Q. Having reviewed Mr. Ng's medical records, how do the conditions that he has that you've learned about, how do they compare to the general population?

A. He's a typical patient. He's a typical patient with hypertension, diabetes, and atherosclerosis and coronary artery disease. He is the kind of patient I have seen in practice for many decades, and actually he is in better shape than many patients because we know his coronary anatomy. All the arteries are open. He has brand-new present-generation Xience, top-of-the-line drug-eluting stents implanted in two branches of the circumflex coronary artery with an excellent angiographic result. In that respect, we know more about his heart than we know about the heart of most patients who have had a cardiac angiogram within the past two weeks.

We also know that his heart squeezes normally, which means he's in better shape than many patients in my practice. After all, I see patients with heart failure and impaired ventricular function who nevertheless lead normal lives on medication. So this man is better in that regard, too. His hypertension needs some adjustment. His diabetes needs some

adjustment. That's a medication adjustment, which is normal medical care being done by a variety of practitioners, and he should stop smoking.

Q. Who can provide the medical care if adjustments are needed for the hypertension or the diabetes?

A. The answer to that is any practitioner, a general practitioner, a nurse practitioner, an internist, a cardiologist, occasionally. Really, it doesn't matter.

Q. What is your medical opinion of the proper treatment of Mr. Ng going forward?

A. The proper treatment is that he should stop smoking, that he should be more attentive to his diet because his diabetes is poorly controlled and that he needs to get continued medical care again by any practitioner to make fine-tune adjustments in his antihypertensive program so that he can be brought into a more optimal range. He needs to be provided with and needs to take his dual antiplatelet therapy. Those are the main issues.

Q. Again, who can provide that treatment?

A. Any practitioner, a general practitioner, certainly an internist. Nurse practitioners can do most of this. And probably once or twice a year he should see a cardiologist who will really -- not to diminish my own field, but if you have stents and they are open and the patient feels OK, all we are doing is making sure that the patient is taking his dual antiplatelet therapy so that if those medicines are provided by

another practitioner, there is really nothing to do except ultimately make a decision on exactly how long the Plavix is going to be given and the data is really not clear on that. After 18 months, many doctors would just say, keep on the Plavix. Sometimes if the patient has had a bleeding problem, we might stop the Plavix. It's really as simple as that.

Q. I want to direct your attention now to Government Exhibit 61.

A. I see it here.

Q. Have you reviewed this document?

A. Yes.

MS. ECHENBERG: The government moves to admit Government Exhibit 61.

MR. PARK: I have no objection.

THE COURT: Government Exhibit 61 is admitted in evidence.

(Government Exhibit 61 received in evidence)

Q. Just in very general terms, what is this letter?

A. This is a letter from the Bureau of Prisons and this letter basically says that in the opinion of the Bureau of Prisons, they can properly take care of this patient.

Q. What, if any, view do you have of this letter?

MR. PARK: Objection to form, your Honor.

THE COURT: If you could rephrase the question.

Q. Do you agree or disagree with the conclusions of this

letter, based on your medical opinion?

A. I completely agree.

Q. Why is that?

A. Because, as I've stated, the patient has common medical problems that are treated in standard ways, and I would expect that the Bureau of Prisons could provide that care. They say they can. And mostly the care is to continue the medicines that the patient is on and for him to see a medical practitioner who can make fine-tune adjustments in the blood pressure medication, if necessary, and that's routine medical care.

Q. Are you aware of any medical reason that Mr. Ng would need one more week before he surrenders to prison?

A. No medical reason.

Q. Are you aware of any medical reason why he couldn't surrender to prison tomorrow?

A. No medical reason.

Q. Dr. Schneller, you were here when Dr. Pan testified. Do you recall when he spoke about the fact that Mr. Ng is the legal client of his father-in-law?

A. Yes, I heard that.

Q. As a professor of medicine, if one of your students asked you for your opinion about whether that's appropriate, what would you tell them?

A. There is always a risk that in the care of a patient who is

a relative or closely related that ordinary dispassionate medical judgment might be hard to maintain when one was emotionally close to a patient. And, similarly, when it comes to giving professional opinions as testimony, there is a risk that consciously or unconsciously such a doctor might slip into being more of an advocate for a patient than a dispassionate expert in medicine.

MS. ECHENBERG: One moment, your Honor.

Nothing further, your Honor.

THE COURT: Cross-examination.

Mr. Park.

MR. PARK: Yes, your Honor.

CROSS-EXAMINATION

BY MR. PARK:

Q. Dr. Schneller, I want to make sure I understand your testimony. You don't disagree that Mr. Ng has diabetes, do you?

A. No, I do not.

Q. You don't disagree he has hypertension, do you?

A. I do not.

Q. You don't disagree that he has trouble with high blood pressure. He has had trouble --

MS. ECHENBERG: Objection. Vague.

THE COURT: I'll allow it.

A. I wouldn't use the word trouble. I would say, like the

majority of patients with hypertension, his hypertension is imperfectly controlled. 50 percent of patients who have high blood pressure in this country have their blood pressure imperfectly controlled. He is one of them.

Q. Is 190 blood pressure reading in perfect control?

A. Imperfect. I said imperfect.

Q. Thank you. I misheard.

Would you also agree that last week, starting Monday, he had two stents implanted in two arteries?

A. That was July 9. If that's Monday, that's correct, yes.

Q. And during that same week, the very next day, for whatever reason, the hospital detected or discovered that he had suffered a minor stroke?

A. Yes. Except to me, as a cardiologist, you can't say for whatever reason. The reason is crucial.

Q. I'm just asking you, did he suffer a minor stroke?

A. Yes. He had three punctate lesions in the brain.

Q. So he had two stents placed?

A. Yes.

Q. And then the next day they found that he had a minor stroke, correct?

A. Absolutely true, yes.

Q. Now, in addition to that, last week they found that he has a serious spinal disease, correct?

A. Well, that spinal disease was present in 2012.

Q. They discovered it last week?

MS. ECHENBERG: Objection, your Honor. Let the witness answer, please.

MR. PARK: He is not being responsive, your Honor. I asked him whether it was discovered last week.

THE COURT: He didn't get a chance to finish his answer. If he can finish his answer, and then you can have your next question if it's not entirely responsive.

A. No. The discovery that he had cervical spine disease was made in 2012, then again in 2014, and again in 2018 on the basis of the MRI done at NYU.

Q. Again, the MRI done last week showing that he had serious spinal disease, correct?

A. Yes. But we knew that based on 2012 and 2014 data.

Q. When you say we knew that, you are talking about based on your professional review of document and medical history, correct?

A. The medical records that are provided.

Q. What you don't know is to what extent that knowledge or to what extent Mr. Ng, as a patient, was familiar with that condition. That you don't know, correct?

A. I am not sure what you are asking. Are you asking me, did Mr. Ng know his condition?

Q. Yes.

A. I have no information about that.

Q. Now, in addition, last week, he was diagnosed with an entirely different condition called Meniere, correct?

A. Meniere's disease.

Q. Getting my mouth around all these medical terms is difficult.

Now, notwithstanding that mix of ailments and conditions, it is your testimony that Mr. Ng is just fine, is that right?

A. I did not get asked the question whether he was just fine. He has chronic medical conditions which are extremely common which have been and can be treated with standard measures by a multiplicity of practitioners, and what is unique about his case is that he has been subjected to an extensive diagnostic evaluation both invasively and noninvasively.

Q. That's not my question, Doctor. My question was, do you think that he is fine? If your answer is no, he has conditions, that's the answer.

A. That's my answer. I never said that he was fine. I said that he needs to be continued to take his medicines and to be treated, sure.

Q. Now, by the way, you are being compensated for your time testimony, correct?

A. I'm being compensated for my time.

Q. Am I right that you are getting paid $5,000 for your testimony today?

A. Yes. For my time. For time.

Q. Fair enough.

A. Right.

Q. Time equates to $5,000 in this case, is that right?

A. Yes. But the payment is not for testimony. It's for time.

Q. I understand. In addition to that, you were getting paid $500 per hour for additional time that's not related just to the testimony, correct?

A. That's correct.

Q. How much time would you say that you've put into preparing for your testimony at $500 an hour?

A. I am not sure. In excess of 10 hours, I'm sure.

Q. When you, Doctor, have a patient who has a history of hypertension and diabetes and who has suffered a minor stroke and has two stents placed in him, what do you normally recommend after the stent procedure in terms of how long that person should stay away from work, for example?

A. They should take a day off and go back to work the next day. The only thing that it depends on, it has nothing to do with the heart, particularly if the heart is normal, as it was in this case in terms of the ejection fraction. It has to do with the catheterization had a complication in the groin, and they do some sort of labor where they lift something and are worried about the groin, the puncture in the groin. If that's not the case, they take a day off and go back the work the next

day. If it's a radial artery, I'm even less concerned.

Q. You have had patients --

MS. ECHENBERG: Objection, your Honor. Can we just make sure that the witness is finished with his answer in each case.

THE COURT: Were you finished, Doctor?

THE WITNESS: Yes.

THE COURT: Go ahead.

Q. You have had patients who have had hypertension and diabetes who have had a minor stroke and two stents placed in them in combination and you've said to them, to such patients -- first of all, am I right that you have had patients meeting all of those criteria?

A. The only thing that my patients do not meet that criteria is implicit in what I described, these so-called strokes to be, which is an MRI scan showing three punctate lesions that happens to be done for reasons that have nothing to do with neurological symptoms, as ultimately determined, one day after a stent. So you have to absent that from the general question because it is very rare to stumble -- I'd like to finish. It's very rare to stumble upon that information. But since that information is included in this case and we know that those punctate infarcts were caused by the procedure and are only related to that procedure and the patient is now on dual antiplatelet therapy, that risk is over.

Q. So the answer is, you have --

MS. ECHENBERG: Objection.

A. The answer.

MR. PARK: Your Honor.

THE COURT: He wasn't done answering the question.

MR. PARK: I understand. He is making his speech each and every time for whatever question I ask, Judge. The question is very --

THE COURT: Just to be clear, I'm not a babe in the woods. I'm not a jury. I just want to get this done. Whether he finishes it now or it happens on redirect, it's coming out.

I understand, Mr. Park, under normal circumstances if there was a jury, yes. But let the doctor finish and then we will move to the next question.

A. I can't remember the last time, if ever, I've had a patient who had an MRI studied that stumbled upon this information, but it wouldn't change anything because they were clinically silent and they are not going to happen again. That means there is no risk. So that does not contribute in any way to the advice given to a typical stent patient who is going to go back to work a day or two after a stent. A stent is an outpatient procedure. He was discharged eight hours after the procedure. He is good to go.

Q. Just to be clear, I'm talking about the universe of your patients in which you have said you can go to work the next

day?

A. Yes.

Q. I'm talking about a universe of patients that are diagnosed with diabetes, hypertension, and let's set aside the minor stroke. Diabetes, hypertension and two stents put in coronary arteries. You said to them, go to work the next day, is that right?

A. Absolutely. Because diabetes and hypertension are common risk factors for patients to get stents. And if the stent procedure is uncomplicated, the patient goes home eight hours, they take the rest of that day off, they take a full day off. And then if they feel well, they can go right back to work, absolutely. That's advice that I have given and would give at any time. That's advice I have been giving and will continue to give.

Q. You heard Dr. Pan say that, generally speaking, for a patient who has had stents implanted, his general practice is to recommend two weeks off from work. That's not your practice, is that right?

A. It is not my practice, no.

Q. Would you agree that blood pressure readings that consistently exceed 150 over a three-day period is a source of concern to you?

A. It means that the blood pressure is not optimally controlled and may require another drug. It is not a concern

that there is going to be an imminent adverse outcome. It's not high enough to do that.

Q. It's a concern that it's not adequately under control?

A. Yeah.

Q. What can be some of the consequences of not adequately controlling blood pressure in a patient of Mr. Ng's qualities?

A. Short term, weeks, months, 150. There is no consequence of that, no. There is no consequence. Long term --

Q. I said in excess of 150.

A. It depends how high. It depends how high.

Q. What if it's 180 consistently?

A. If it's 180, that requires, as Dr. Pan did, the prescription of another medicine. And if that doesn't work, after a requisite number of times to determine whether that medicine is going to work, which is going to be 10 days, a week, something like that, another dose can be given. But there is no short-term risk. It's not perfect blood pressure control.

Q. So I'm clear about your testimony, is it your view that Dr. Pan's opinion with respect to Mr. Ng that he would recommend two weeks from the point of stent before, for example, going back to work, is unreasonable? Do you think that's wrong?

A. I think that doctors can differ. There can be a divergence of opinion without being wrong or right. I don't see any

medicine in it. There is no medical necessity for that. There is nothing that is anticipated medically that is going to be avoided by rest for two weeks or by returning to work in a day or two, so there is no medicine behind that opinion. That's all I'm saying.

Q. Does the fact that a patient may want to have continuity with his primary care physician for a period of time, is that a factor that you would consider relevant?

A. Well, I've been a doctor for a long time. I have had patients who have been in my care for 33 years. I've also had patients who have been my patients for 20 years whose insurance changed, and they leave me immediately and surrender all that continuity of care. I have gotten over that years ago. But I do think from a medical point of view, from a medical point of view, there is no doctor who is so special that the control of blood pressure or the adjustment of antihypertensive medicines or diabetes or the follow-up of a stent patient cannot be done by a variety of other practitioners. That happens all the time.

Q. My question was different. Do you believe that one of the factors that a good doctor should consider is the patient's relationship with that doctor in managing blood pressure or hypertension?

A. Yes. That's nice, but it's not medically necessary.

Q. When you say it's nice, meaning it's totally dispensable?

THE COURT: Say the question again. The answer was: Yes, that's nice, but it's not medically necessary. And then the question was: When you say it's nice, meaning it's totally dispensable? That was the question.

MR. PARK: Yes.

A. I would say, and I'm not diminishing the importance of continuity of care because I've been a doctor for a long time, I do believe in the value of that, even though it's a little old-fashioned. I would say that there is no medical necessity in it at all, particularly in a situation where we already know that this is not such a special situation, for example, where once Dr. Pan said stop smoking, the patient stopped smoking. It's not as if this doctor has been uniquely successful. This is no disrespect to Dr. Pan because many patients can't stop smoking, but one should not inflate that relationship. In general, these conditions can be managed by any doctor and, therefore, there is no medical necessity in the continuation of the care of one doctor. That is my testimony.

Q. You referred to Mr. Ng's smoking both on direct examination and now again. You kind of volunteered that information. How do you know he smokes today?

A. Use of tobacco. Just from the medical records.

Q. You don't actually know whether he has been smoking for, let's say, the past two weeks?

A. I don't know if he's been smoking for the past two weeks,

no.

Q. Now, you had talked about the potential for extreme hypertension resulting in a hemorrhagic stroke, correct?

A. Yes.

Q. And I believe you said that you have to control the blood pressure to prevent that from happening, is that right?

A. I said two things, that it really has to be extreme. None of these values are high enough to cause a hemorrhagic stroke, but it is important in general to control the blood pressure. I'm not in any way arguing against the importance of blood pressure management.

Q. And you believe, do you not, that stress, undue stress, can affect one's ability to control blood pressure?

A. The way you phrase it I can't answer it. But if what you mean is, does stress -- can stress elevate the blood pressure? Sure. And the treatment is blood pressure medication. It is not relief of stress. It is antihypertensive therapy. So it may be, as is the case, and stress is part of everybody's life, anybody who is living a life may face stress of a variety of ways and it is not for the external person to know what will make a person stressed in general. But if stress increases the blood pressure, the treatment is antihypertensive medication, unless the patient has a stress disorder, in which case we give angiolytic medication.

Q. Does a patient's history of prior strokes increase the risk

of a hemorrhagic stroke?

A. Well, in this particular case --

Q. I'm not asking. Just generally.

A. It depends on what kind of stroke they had. The devil is in the details. These punctate --

Q. I'm not talking about that, Doctor. Let me withdraw. Let me back up.

Are you aware that within the medical history of Mr. Ng there are reports of prior strokes? Not just these punctates that occurred last week. Are you aware of that?

A. I am. But I'm also aware that the MRI scan that was done last week showed no evidence of any prior stroke. And if he had a prior stroke, that would be reflected almost certainly on that MRI. So although there are reports, there is no evidence that he has had a prior stroke.

Q. Even if they are minor strokes, they would be reflected even after years?

A. You should see an infarct.

Q. Are you a neurologist?

A. No.

Q. You are not qualified as a neurologist, are you, Doctor?

A. To the extent that neurology is part of medicine, that's my opinion.

Q. So your opinion is that even if somebody endured minor strokes in the past, you would be able to detect that in a

current MRI?

A. More likely than not. I am not talking about a TIA, which leaves no signature on an MRI. But if a patient has had a stroke, certainly any stroke sufficient to increase his risk for another stroke, we ought to have seen that on the MRI done at NYU, and there was no evidence of that.

Q. What experience do you have in actually detecting a history of strokes in an MRI?

A. I don't know what you mean by that.

Q. Have you looked at MRIs --

A. No. I am going just by the written report. I have not looked at the images. I am not competent to interpret the images. I am going by the written report in the medical record.

Q. Doctor, just so it's clear, you have not met with Dr. Ng?

A. I have not.

Q. You don't know what he looks like?

A. I do not.

MR. PARK: We have no further questions.

THE COURT: Anything?

MS. ECHENBERG: Can I have one moment.

REDIRECT EXAMINATION

BY MS. ECHENBERG:

Q. Dr. Schneller, in your experience, is two weeks' rest after a stent procedure common medical advice?

A. No, it is not.

Q. What is the common medical advice, in your experience?

A. Take a day or two off and then resume all of your normal activities, including business, professional, sexual, recreational, vocational, anything you want to do.

Q. And in order to be able to testify today, what, if anything, did you do with other responsibilities you might have otherwise had?

A. Well, my entire day was cancelled. My entire day was cancelled because first I thought I needed to be here at 8:30. That was not possible to reschedule those patients because they were cancelled late on Friday.

Q. In part is that what the $5,000 accounts for?

A. Yes.

Q. I want to just briefly again run through the defendant's conditions. He had a stent procedure on July 9, correct?

A. Yes.

Q. And what is the treatment for that procedure?

A. The treatment is the administration for about 18 months, maybe longer, of dual antiplatelet therapy, of aspirin and Plavix.

Q. And who can oversee that treatment?

A. A nurse practitioner, a general practitioner, an internist, or a cardiologist.

Q. And the three punctate infarcts that were found on the

brain MRI, what is the treatment for that?

A. These were clinically silent, incidentally discovered. They are of no clinical importance. They require no treatment. But to the extent that atherosclerosis exists in the patient's body, if any doctor was worried about that, the patient would be given an aspirin tablet. But this patient is taking, in addition to a daily aspirin, Plavix. And, in combination, they markedly diminish the risk of arterial emboli forming or breaking off, so that would be the treatment. He is already on it.

Q. And who can administer that treatment?

A. A nurse practitioner, a general practitioner, an internist.

Q. And you spoke about spinal stenosis. Do you recall that?

A. Yes.

Q. You referred to medical records you reviewed that showed that Mr. Ng had that as far back as 2012?

A. Yes.

Q. What were the records you were referring to?

A. That was included, I believe, somewhere in the NYU records where those dates were specifically mentioned. I recall a medical record in which it said that a study done in 2014 showed no progression in the cervical disk disease from the one that was done in 2012.

Q. And for the spinal stenosis, what is the treatment?

A. The treatment is activity, mostly walking, analgesia, which

means Tylenol, or occasionally a nonsteroidal like Motrin.

Q. Who can administer that treatment?

A. A nurse practitioner, a general practitioner, an internist, a physical therapist.

Q. And the Meniere's disease, what is the treatment for that?

A. The treatment for Meniere's disease is imperfect. Antivert is the medicine he was given. Sometimes diuretics are used. And that is basically family practice, nurse practitioner, internist. If the patient needed to see a neurologist, that's already been done, so that there is no need for further diagnostic study for that condition.

Q. And those medical practitioners you were just listing, those are the people that are qualified to treat Meniere's disease?

A. Yes.

Q. Finally, the blood pressure hypertension that we have been discussing, what is the treatment for that?

A. Blood pressure medication, cessation of smoking, weight reduction, but mostly swallowing medications, the doses of which need to be adjusted to make the blood pressure optimally controlled.

Q. Who can oversee that treatment?

A. A nurse practitioner, a general practitioner, a family practitioner, an internist, or a cardiologist.

MS. ECHENBERG: One moment, your Honor.

Nothing further.

THE COURT: Mr. Park, anything.

MR. PARK: Nothing further?

THE COURT: Thank you, Doctor. Thank you very much. You may step down.

(Witness excused)

THE COURT: Is that it?

MS. ECHENBERG: Yes.

THE COURT: Mr. Park, anything else?

MR. PARK: I wanted to make sure we are going to get to argue a little bit before you release us, Judge. I would like to make a statement.

THE COURT: OK.

MS. ECHENBERG: Can we take a very short break before that, two minutes?

THE COURT: We can take a five-minute break. We will come back. I will allow five minutes at most for your comments, and then I'll make a ruling.

MS. ECHENBERG: Your Honor, we are going to let the doctors go.

THE COURT: Doctor, you are excused. Have a good evening.

(Recess)

THE COURT: Mr. Park.

MR. PARK: Yes, your Honor.

Your Honor, I want to be clear on what we are asking for. We are asking for just two weeks from the stent implantation. You heard from Dr. Pan, and Dr. Schneller may disagree. His practice may be to just send his patients off the very next day after the stent.

But Dr. Pan, as well as Dr. Attubato, who implanted this stent, they both agree that two weeks is a reasonable amount of time. Why is that? In part it's just because of stresses issue. Dr. Pan made very clear that what he wants to make sure is that there is there isn't undue stress, blood pressure levels are controlled.

And I understand that these obviously are not ideal circumstances. These are not normal circumstances. Neither are the conditions that Mr. Ng finds himself in, medical conditions that he finds himself in. By any measure, these are a complex stew of issues, medical issues, diabetes, hypertension. People can make light of the fact that he had a punctate stroke. It's still a stroke.

The reason why I think this is important, Judge, is to not lose sight of what we are dealing with, is a patient's subjective views and fears, and that's what we are dealing with here. It's just fear. It's also fear not just of the barrage of conditions that he underwent last week, just last week, but, frankly, the unknown of going to a federal penitentiary, after a three to four-hour drive to Allenwood, where he may or may

not have access to medication or medical assistance as necessary, if there is a crisis of some kind, and being in a penitentiary where this 70-year-old man from Macau, who has a grade school education, will not be able to communicate with his doctors, and maybe there will be a Chinese translator there. Hopefully, there will be.

But even with that situation, Judge, to say that it would be far more optimal for Mr. Ng to have just another week with Dr. Pan, just to make sure his blood pressure is under control, just to make sure that the rest of him is just made a little bit more comfortable with what's about to happen, that's really all we are asking for.

Dr. Schneller spent a lot of time about stent thrombosis. We weren't talking about stent thrombosis. We are talking about, in fact, the possibility of undue stress and fear, frankly, increasing his blood pressure to such a point that it becomes very dangerous for him.

Now, I have to say, I was quite struck by Dr. Schneller's notion that somehow the continuity with a physician that somebody has worked with for the past several years really doesn't matter. It can really be anybody. It can be a nurse practitioner. I just don't think you can account, Judge, for this particular complex of ailments that Mr. Ng has had to go through in addition to the fact that we are talking about him traveling for a few hours to a federal penitentiary where he

will be locked away from his family and be dealing with a new doctor who somehow is going to get his arms all around this and feel as confident as Dr. Schneller. Maybe Dr. Schneller feels more confident because he has had 50, 40 years of practice. There is no question, he is an eminent practitioner and a scholar in this area.

We are dealing with somebody's subjective fears and what that might do to his blood pressure. And the doctor who knows him best who has seen him repeatedly over the years is Dr. Pan.

For all of these reasons, Judge, I know you gave us five minutes, it's really as basic as that. All we are asking for is another several days where Dr. Pan can be here to monitor.

As you know, even over this weekend, the blood pressures were abnormally high. Now, the government may say, we don't know that they are reliable. But we don't know that they are not. It's a matter of just taking a couple more days, giving Dr. Pan some time to just figure out whether this is under control, and then putting him in the car on Monday with guide posts, showing up at Allenwood and starting. I don't think it's a big ask, Judge, and even with the history of knowing that the original surrender date was July 10.

Let me say one other thing. There has been a suggestion by the government that Mr. Ng is just trying to

delay the surrender date. I want to respond to that because Mr. Ng had his extended family, seven to eight grandchildren, travel to the United States, stay at the apartment so that they can all say good-bye. They were here. I think they still are here.

But the point was to say good-bye to grandpa so he could go. He was ready to leave. And he also shares with me, and I think quite rightly, the longer he stays out, the longer he is going to stay in eventually. In other words, he is only prolonging the amount of time, the back end when he is going to be in prison.

I don't think that's what this is about, Judge, at all. I think this is just about fear and about a fear that's been created based on this crescendo of events that just happened last week to a guy who already knew he had diabetes and hypertension and now this Meniere's disease and this severe cranial disease. It just builds.

For him to have just another week with Dr. Pan, where he can just make sure that they got the medication under control, I think that's a small ask, and that's all we are asking for.

THE COURT: Thank you.

Who is going to do the argument?

MS. ECHENBERG: I will, your Honor.

Mr. Park just said we shouldn't lose sight of what we

are dealing with. I think that's absolutely right. What we are dealing with is a man who was convicted a year ago, a man who has had a July 10 surrender date for a long time, who has made multiple legal efforts to extend that date, all of which failed, and on the eve of surrender all of a sudden was in the hospital multiple times.

And we have now established that none of those conditions, none of the treatments that he received should prevent him from surrendering. He may be afraid, he may be very afraid. I suspect everyone who is on the eve of surrendering to a four-year prison term is very afraid. But because this defendant can go and get a lot of medical tests and be seen by his lawyer's son-in-law's doctor and then call that doctor as a witness who testify to your Honor, that is not a reason why this defendant should be given another week or even another day to surrender.

Dr. Schneller testified, and the defense has conceded, he is a preeminent cardiologist. He has had decades of experience, far more than Dr. Pan. He has seen every condition in the book. He has taught hundreds, I am sure, of other physicians over the years.

And his conclusion is simple. These are common medical conditions that can be treated by practically any medical practitioner, including a nurse practitioner, and that is absolutely consistent with what the BOP has told us. After

reviewing the same medical records that Dr. Schneller reviewed, that they are absolutely capable of managing his blood pressure, of managing his diabetes and of taking care of all of his other conditions.

So the bottom line here, your Honor, is there is no medical necessity for this defendant to stay out past his surrender date tomorrow.

Now, what he is asking for at base is his own personal preference to stay out, to have more time, and he says his personal preference to see Dr. Pan one more time.

Let me address that. Let me address that in two ways. One, he has no special relationship with Dr. Pan. After Dr. Pan decided that there was nothing more to do on June 15 of 2018, and that he was basically healthy, what did Mr. Ng do? He went to a private facility, Elitra Health, and he asked for a panoply of tests and then came back to your Honor asking for an MRI and more heart tests and all sorts of things. That was not only not Dr. Pan's recommendation, Mr. Ng didn't even tell Dr. Pan about that, so there is no special relationship here. And then when NYU decided, as a precaution, that they would give him an angiogram, he didn't even tell Dr. Pan. Dr. Pan didn't find out until after the stent had been implanted. To the extent that they are arguing that there is some special relationship here, that is just belied by the facts.

Secondarily, this defendant, nor any defendant, is not

entitled to their personal preference of what doctor they might want to see one more time when they are going to prison, six days after their surrender date, when both practitioners, I believe, conceded that these are standard conditions. They can be treated by regular doctors, primary care doctors, even a nurse practitioner. So he should not get special treatment here. This is a defendant who has gotten a lot of special treatment and it must end. There is no medical reason that he get that special treatment here.

THE COURT: Just to be clear, I am not sure exactly what you mean by special treatment. Never mind. Go ahead.

MS. ECHENBERG: Your Honor, what I meant was, because this particular defendant could afford to incarcerate himself in his own home, he was able to stay out on bail for many years, whereas someone who is not as wealthy and not as fortunate would have been in prison for all of these years. That is all that I meant.

THE COURT: I think -- I don't want -- the bail statute speaks in terms of risk of flight and the problem is, it doesn't speak in terms of what you can do to ameliorate that. I know my colleagues, some of my colleagues actually have had cases and disagreed about that, but finish your argument.

MS. ECHENBERG: My only point is, this particular defendant could afford that type of incarceration.

Let's go specifically to Dr. Pan's recommendation that two weeks is necessary. First, that is not what Dr. Schneller understands to be the common practice. He has his patients go to work the next day. I think he was extremely credible. And his view should be credited. But Dr. Pan's only basis for that two weeks appears to be Dr. Attubato's letter, NG Exhibit 20A. That letter has been discredited. Dr. Pan was not part of that call. But Dr. Schneller was. And on that call Dr. Attubato walked back from the two weeks. He conceded that one week is the high risk category, and after that the risk remains the same for months, even years. We have passed that one-week period. Again, there is no medical basis for that extra week.

Your Honor, I would just close by saying that the BOP can handle these conditions. Dr. Schneller agrees that the BOP with standard doctors can handle these conditions. And we urge the Court to order or to maintain the Court's order that the defendant surrender at noon tomorrow.

THE COURT: This is what we are going to do with regard to the bail. I do find that there is no medical reason for Mr. Ng to remain out until Monday. However, I do understand that -- let me get to the punchline. I'm allowing him until Wednesday. He can see Dr. Pan, or whatever doctor he wants to, tomorrow to make a determination about whether or not the second medicine that he has been prescribed, whether they should up the dosage from where it is now, but he is to report

on Wednesday.

And the basis for that, as I said, I don't find it's a medical necessity for him to remain out. I find that, as Dr. Schneller said, the difference of opinion here -- again, he didn't indicate that Dr. Pan was incorrect, but he said his practice was within a day or two that someone go back to work.

There are certain things I have no control over that are static. By that, I mean, the anxiety, the fear, the desire not to go is going to be there, and there is nothing I can do to relieve that, and it will be there for Mr. Ng Wednesday, Thursday, it will be there until Monday.

So that's something, Mr. Park, although I recognize and your argument may be that it will be somehow mitigated or ameliorated over the next several days, I don't believe that that's something that warrants not having Mr. Ng surrender.

I do find that Mr. Ng should surrender on Wednesday and, obviously, all of the conditions prior to this for Mr. Ng's medical visits should be the same, and I leave it to the parties to make sure that there is an understanding about that if he is going to see Dr. Pan or another physician tomorrow about this issue. He is to report to the facility Wednesday by I think we said noon.

MS. ECHENBERG: Correct, your Honor.

THE COURT: Is there anything else?

MR. RICHENTHAL: I just have two administrative

matters related to exhibits, just so the record is clear. We offered and the Court admitted Government Exhibits 81 and 82. Those were not subject to your Honor's order regarding medical information, so we would request that those also be filed under seal or subject to appropriate redaction. Again, that's GXH 81 and GXH 82.

THE COURT: What I will do, Mr. Richenthal, is review them, see if they are amenable to redaction, and then we can make the appropriate redactions.

MR. RICHENTHAL: A related issue, but not medical information, I noticed that GXH 83, which is Dr. Schneller's CV, contains his full birthdate. We would ask that the month and day be redacted, consistent with Rule 49.1.

THE COURT: That's fine. Personal identifying information of that sort should be redacted, as well as if there is anything else. Take a look at both his CV and also Dr. Pan's. I didn't go back to see whether Dr. Pan's birthdate and the like are on there. So a redaction can be done on those records.

MR. RICHENTHAL: Nothing further from the government.

THE COURT: Nothing further.

MR. PARK: No, your Honor. Thank you.

THE COURT: Thank you very much.

Thank you very much to the court reporter. I recommend that someone get the transcript other than me.

MR. RICHENTHAL: We already intended to order it.

THE COURT: Carry through on that.

We stand adjourned.

(Adjourned)

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